Online Bids

(through E-Procurement Portal of CPPP)

are invited

for

Campus Surveillance System: Supply, Installation, Testing, Commissioning and Maintenance at IIT (BHU) Varanasi

Tender No.: IIT(BHU)/IPCell/2024-25/CCTV/317

Tender date: 14.08.2024

Last Date of Submission: 05.09.2024

Tender opening: 06.09.2024



Chairperson
Campus Surveillance System
Institute Purchase Cell
Indian Institute of Technology
(Banaras Hindu University)
Varanasi-221005

E-mail: office.surveillance@iitbhu.ac.in

INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI – 221005

DEPARTMENT/SCHOOL/CENTRE: INSTITUTE PURCHASE CELL, IIT (BHU) VARANASI

TENDER ENQUIRY DOCUMENTS

(NOTICE INVITING TENDER)

IIT (BHU) Varanasi invites online tender from manufacturers (or their 'authorized' dealers that they have been authorized to quote in response to this NIT) of the following items are invited:

Sl. No.	Tender No. and Date	Specifications & Quantity of the item	Earnest Money Deposit to be submitted
1.	IIT(BHU)/IPCell/2024-	As per Annexure I	25 Lakhs
	25/CCTV/317 dated 14.08.2024		

Tender Documents may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/eprocure/app. Tenderers can access tender documents on the CPP Portal. Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website http://eprocure.gov.in/eprocure/app as per the schedule given in the next page.

Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.

No manual bids will be accepted. All quotations (both Technical and Financial should be submitted in the E- procurement portal).

The Tender should be addressed to Chairperson, Campus Surveillance System, Institute Purchase Cell, Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005, U.P., and should be submitted online on or before the date and time of Bid closing date as mentioned in critical date sheet.

The Institute shall not be responsible for any delay in submitting online Bids. The Institute reserves the right to accept or reject any bid, cancel the Tender without assigning any reason thereof. No correspondence in this regard will be entertained.

Chairperson
Campus Surveillance System
Institute Purchase Cell
Indian Institute of Technology
(Banaras Hindu University)
Varanasi-221005

INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI – 221005

DEPARTMENT/SCHOOL/CENTRE: INSTITUTE PURCHASE CELL, IIT (BHU) VARANASI

SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND MAINTENANCE OF CCTV CAMPUS SURVEILLANCE SYSTEM AT IIT (BHU) VARANASI

CRITICAL DATA SHEET

Name of Organization	Indian Institute of Technology (Banaras Hindu University)
Tender Type(Open/Limited/EOI/Auction/Single)	Open
Type/Form of Contract (Work/Supply/ Auction/Service/ Buy/ Empanelment/ Sell)	SUPPLY
Date of Issue/Publishing Original Tender	14.08.2024 (6.55 pm)
Document Download Start Date	14.08.2024 (6.55 pm)
Document Download End Date	05.09.2024 (4:00 PM)
Pre Bid Meeting Date* *Queries, if any, to be discussed, MUST be emailed to office.surveillance@iitbhu.ac.in, before the date of Pre Bid meeting for consideration.	21.08.2024, Time: 11:00 AM Committee Room, Ground Floor, Admin Building, IIT(BHU).
Corrigendum, if any	23.08.2024
Last Date and Time for Uploading of Bids	05.09.2024 (4:30 PM)
Date and Time of Opening of Technical Bids	06.09.2024 (5:00 PM)
Tender Processing Fee (including GST as applicable)	Rs. 23,600/- (For Tender Processing Fee) & Rs. 25 lakhs (For EMD) (To be paid through RTGS/NEFT) as per the
EMD	following details: Name of Account - Registrar, IIT(BHU) Name of the Bank - State Bank of India Name of Branch - IT, BHU, Varanasi Account No 32778803937 IFSC Code - SBIN0011445 The proof of payment must be enclosed with Technical Bid. Both the transactions should be done separately.
No. of Covers (1/2/3/4)	02
Bid Validity days	365 days (From the date of opening of tender)
Address for Communication	Chairperson, Campus Surveillance System Institute Purchase Cell Indian Institute of Technology (Banaras Hindu University) Varanasi-221005
Contact No. & E-mail Address	office.surveillance@iitbhu.ac.in

INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI – 221005

DEPARTMENT/SCHOOL/CENTRE: INSTITUTE PURCHASE CELL, IIT (BHU) VARANASI SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND MAINTENANCE OF CCTV CAMPUS SURVEILLANCE SYSTEM AT IIT (BHU) VARANASI

INVITATION FOR BIDS

1. Online bids are invited from eligible bidders for the following:

Sl. No.	Tender no.	Specifications & quantity of the item	Earnest (EMD)			
1.	IIT(BHU)/IPCell/2024- 25/CCTV/317 dated 14.08.2024	As per Annexure I	25 Lakhs			

- 2. Interested eligible Bidders may obtain further information from IIT (BHU) website: https://www.iitbhu.ac.in/tenders or from Central Public Procurement Portal (CPPP) https://eprocure.gov.in/eprocure/app.
- 3. Intending bidders are advised to visit IIT (BHU) website https://www.iitbhu.ac.in/tenders and CPPP website https://eprocure.gov.in/eprocure/app regularly till closing date of BID submission of tender for any corrigendum / addendum/ amendment.
- 4. Earnest Money Deposit is to be deposited electronically by RTGS/NEFT in the account of Registrar, IIT (BHU) in the Bank details mentioned above. Bidders are required to submit the scan copy of payment receipt details of Tender fees and EMD payment at the time of Bid Preparation.
- 5. This Tender Document contains the following:
 - A. Instructions for Online Bid Submission
 - **B.** Instruction to Bidders
 - **C.** General conditions of contract (GCC)
 - **D.** Special Condition of Contracts
 - E. Check-list for Bid/Tender submission
 - F. Declaration Certificate
 - **G.** Technical specifications for the complete project (Annexure I)
 - **H.** Compliance Sheet

SECTION 1: INSTRUCTION FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (http://eprocure.gov.in/eprocure/app). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: http://eprocure.gov.in/eprocure/app.

1. Registration

- 1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.

2. Searching for Tender Documents

- 1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

3. Preparation of Bids

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission

process.

4. Submission of Bids

- 1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD / Tender fees is sought, bidders need to pay the tender fee / EMD separately on-line through RTGS.
- 4. A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 5. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

5. Assistance to Bidders

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

6. General Instructions to the Bidders

- 1. The tenders will be received online through portal http://eprocure.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- 2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3. Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

SECTION 2: INSTRUCTIONS TO BIDDERS

A. Introduction

1. Scope of Work

Campus Surveillance System: Supply, Installation, Testing, Commissioning and Maintenance at IIT (BHU) Varanasi

2. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid, and "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

3. Tender Processing Fees

The Tender Processing fees (For Indian Bidders: Rs. 23,600.00/-) should be submitted ONLINE as per the details mentioned above. Further, the proof of payment must be uploaded with Technical Bid. The exemption will be applicable as per Govt. of India norms.

4. Content of Bidding Documents

The goods required, bidding procedures and contract terms are prescribed in the bidding documents. In addition to Invitation of Bids, the bidding documents include:

- (a) Instructions for Online Bid Submission
- (b) Instruction to Bidders (ITB);
- (c) General Conditions of Contract (GCC);
- (d) Special Conditions of Contract (SCC)
- (d) Schedule of requirements;
- (e) Tender form (technical bid).
- (f) Tender form (financial bid)

The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

5. Amendment of Bidding Documents

At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

All prospective bidders who have received the bidding documents will be notified of the amendment in writing, which will be binding on them.

In order to allow prospective bidders reasonable time within which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

6. Language of Bid

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English language.

7. Documents Comprising the Bid

Techno commercial un-priced bid and priced Bids: The bids are to be submitted in two parts i.e. Techno commercial un-priced bid and priced Bids.

- (a) Techno commercial un-priced bid along with Earnest Money Deposit as shown in invitation to bids shall be submitted through CPP Portal. If the proof of payment of EMD/ Bid Security Declaration Form as per Annexure-VII is not received along with the technical bid, such bid will not be considered. The samples (if required) of all the items shown in the schedule of requirements of each tender should also accompany the techno commercial un-priced bid in a separate sealed envelope.
- (b) Priced bid.

Techno commercial un-priced bid: The Techno commercial un-priced bid prepared by the bidder shall be provided in the following Model Response format:

Model Response format

- (a) Standing of each Bidder Manufacturer/Dealer and past experience in supply of the material (certificates to be enclosed), proof of manufacturing Unit/Dealership alongwith all the documents required for proving the credentials regarding the fulfillment of essential pre-bid criteria.
- **(b)** List of other IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs for which the bidder has supplied or supplying material or having the similar type of contracts and a certificate regarding the satisfactory performance of the contract (In the Annexure III format).
- (c) Copy of the audited balance sheet of the Bidder for the previous financial year indicating the turnover in supply of the relevant materials/service.
- (d) Details of Permanent Account Number and latest income tax clearance certificate.
- (e) Details of GST No. along with a copy of certificate to be attached.
- **(f)** Submission of samples if required, for all items indicated in the schedule of requirements. The make of items proposed to be supplied should be indicated in the format of the schedule of requirements and submitted along with the techno commercial un-priced bid without indicating the pricing components.
- (g) Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the schedule of requirements are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

Price Bid

The price bid shall comprise the techno commercial bid along with the price component indicating the Unit prices for each and every item indicated in the schedule of requirements (Annexure I).

- (h) The prices quoted must be net per unit as shown in the Schedule and must include all charges for delivery at the designated stores i.e. FOR, IIT (BHU), Varanasi and should be mentioned clearly.
- (i) The rate must be stated for each item separately both in words and figures. If there is a discrepancy between the price quoted in word and figures the higher price quoted will be treated as final.

- (j) Quoted prices should be firm and inclusive of all taxes/duties, freight and forwarding charges, handling charges, loading and unloading charges, and insurance charges etc. However, the prices must be reflected clearly in BoQ format by mentioning basic rate, GST, Freight charges, Any other Taxes/Duties/Levies and exemptions thereon as applicable to IITs.
- (k) Further, if required the Institute will make direct payment to the Custom Department against receipt of Challan from the supplier.
- (I) The prices once accepted by the Institute shall remain valid till the successful execution of the order and till supplies are fully effected and accepted for 365 days from the date of acceptance of tender whichever is later. The Institute shall not entertain any increase in the rates during the period. However, in the event there is a reduction or increase in Government levy/duties/taxes during the period of execution of the order, the rates shall be suitably adjusted with effect from the date notifying the said reduction or increase in the Government levy/taxes/duty, if any.

8. Bid Prices

The Bidder shall indicate on the Schedule of requirements (BoQ), the unit prices of the goods it proposes to supply under the Contract and enclose it with the priced bid.

Prices indicated on the Price Schedule shall be entered separately in the following manner:

- (i) The prices quoted must be net per unit as shown in the schedule of requirements and must include all charges for delivery at the designated stores.
- (ii) Any Indian duties, GST and other taxes which will be payable on the goods, if this Contract is awarded;

Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account.

9. Bid Currencies

Prices shall be quoted in **Indian Rupees** only.

10. Period of Validity of Bids

Bids shall remain valid for **365** days after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. A Bidder may refuse the request without forfeiting its EMD, if any. A Bidder granting the request will not be required nor permitted to modify the bid.

Bid evaluation will be based on the bid prices without taking into consideration the above modifications.

D. Submission of Bids

11. The tender has to be submitted ONLINE before the due date. The offers received after the due date and time will not be considered. **No manual bids will be considered**.

12. Deadline for Submission of Bids

Bids must be received by the Purchaser ONLINE not later than the time and date specified in the Invitation for Bids.

The Purchaser may, at his discretion, extend this deadline for submission of bids by amending the bid documents in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

13. Late/Delayed Bids

The offers received after the due date and time will not be considered.

14. Modifications and Withdrawal of Bids

The Bidder may modify or withdraw its bid after the ONLINE bid's submission, as per the provision of CPP Portal.

No bid may be modified subsequent to the deadline for submission of bids. No documents will be accepted in support of essential pre-bid criteria after the last date of submission of bids.

No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its EMD, if any.

E. Bid Opening and Evaluation of Bids

15. Opening of Techno commercial un-priced Bids

The purchaser will open all techno commercial un-priced bids in the first instance.

16. Clarification of Bids

During evaluation of the bids, the purchaser may, at its discretion, ask the Bidder for clarification of its bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

No Bidder shall contact the purchaser on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Institute it should be done in writing.

Any effort by a Bidder to influence the purchaser in its decisions on bid evaluation, bid comparison or contract award decisions may result in rejection of the Bidder's bid.

17. Evaluation of Techno commercial un-priced Bid

Following Evaluation process shall be incorporated:

- a) Evaluation of Pre-qualification criteria as mentioned in Section 4 on the basis of documentary support provided by the bidder.
- b) Evaluation of Technical Requirements as mentioned in Schedule of Requirement on the basis of documentary support provided by the bidder.
- c) Demonstration of Proof of Concept (PoC) as per the required criteria, if the bidder fails to demonstrate their bid shall not be considered for further processing.
- d) Evaluation of other Terms and conditions mentioned in this tender on the basis of documentary evidence.

All the bidders are required to make sure that they have uploaded all the documents as mentioned above with their bid before final submission of bid.

Prior to the detailed technical evaluation, the purchaser will determine the substantial responsiveness of each bid. A substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviations and meets all the essential pre-bid criteria. If any bidder does not meet the essential pre-bid criteria as laid down in the Instruction to Bidders, then his bid will be summarily rejected. No documents will be accepted in support of essential pre-bid criteria after the last date of submission of bids.

The purchaser will reject a bid determined as not substantially responsive.

Those whose technical specifications do not reach the threshold level of acceptability shall be rejected as technically unsuitable. The price bids of the bidders who finally emerge as technically

acceptable shall be opened, evaluated and the contract awarded to the lowest evaluated bidder.

The bidders short-listed by the purchaser based on meeting the essential pre-bid criteria and detailed evaluation regarding satisfying the technical criteria laid down in this tender document may be called for detailed discussions with a team selected for the purpose, at a specified date, time and venue, if needed.

18. Opening of Priced Bids

The Purchaser will open the Priced Bids of only those bidders who meet the essential pre-bid criteria and whose techno commercial un-priced bids have been found to be substantially responsive.

The priced Bids of the technically qualified bidders shall be opened by the tender committee.

19. Evaluation and Comparison of priced Bids

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between words and figures, whichever is the higher of the two shall be taken as bid price. If the Bidder does not accept the correction of errors, its bid will be rejected

Bidders shall state their bid price for the payment schedule outlined in the Clause 14 of General Conditions of Contract. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The purchaser may consider the alternative payment schedule offered by the selected Bidder but it may not be binding on the purchaser.

The purchaser, at its option may ask some more bidders to match the rates of the lowest bidder for creating parallel suppliers.

The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: **Indian Rupees.**

20. Purchasers right to accept any bid and to reject any bid or all bids

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

21. Award Criteria

- i. IIT (BHU) shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated commercial bid.
- ii. In case of abnormally high and abnormally low quoted price, the bidder will be rejected out rightly.
- iii. Also as per instruction mentioned in Annexure I

22. Notification of Award

Prior to the expiration of the period validity, the purchaser will notify the successful Bidder in writing by letter or by fax, to be confirmed in writing by speed post or hand delivered letter, that its bid has been accepted.

23. Factors Affecting the Award of Supply

- The bidder should have its own Contract support facilities. The support facilities should be fully owned and managed by the bidder.
- Conformity with the Request for Bid/Tender required and conditions.
- The assessment is based on the response to the Model Response Outline.
- The assessment of the capability of the bidder to meet the terms and conditions.

- The bidders must have executed similar orders, for which the bidder is quoting, as indicated in clause 1 for IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs.
- The cost and the discount offered, if any.

24. Fall clause

The price quoted by the supplier should not be higher than the maximum retail price, if any, for the stores and the same shall not be higher than the price usually charged by the supplier for stores of the same nature, class or description to any other purchaser.

The price charged for the stores supplied under the contract by the supplier shall in no event exceed the lowest price at which the supplier sells the stores of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduces the sale price of such stores or sells such stores to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the purchaser and the price payable under the contract for these items of stores supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the purchaser to (a) revise the price at any stage so as to bring it in conformity with sub-clause(i) above, or (b) to terminate the contract and purchase the items of stores at the risk and cost of the supplier and in that event the provisions of Clause 28 of General Conditions of Contract shall, as far as possible, be applicable or recover the loss.

SECTION 3: GENERAL CONDITION OF CONTRACTS

1. Definitions

In this Contract, the following terms shall be interpreted as indicated:

- (a) "The order" means the agreement entered into between the Purchaser and the Supplier including all the attachments and appendices and all documents incorporated as per notification of award.
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all the items, which the Supplier is required to supply to the Purchaser under the Contract;
- (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services training and other obligations of the Supplier covered under the Contract;
- (e) "GCC" means the General Conditions of Contract contained in this section.
- (f) "The Purchaser" means the organization purchasing the Goods i.e. IIT (BHU), VARANASI.
- (g) "The Purchaser's country" is India.
- (h) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract.
- (i) "Day" means calendar day.

2. Application

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned Institution.

4. Use of Contract Documents and Information

The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information except for purposes of performing the Contract.

Any document, other than the Contract itself, shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

5. Patent Rights

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6. Submission of the bids

All bids complete in all respects must be submitted online on or before the Bid Closing date and time as mentioned on Critical Data Sheet. Tenders received without earnest money etc. shall be rejected.

Tender documents are available on IIT (BHU) website: https://iitbhu.ac.in/tenders or from Central Public Procurement Portal (CPPP) https://eprocure.gov.in/eprocure/app.

Interested bidders may submit their bid through Central Public Procurement Portal (CPPP) https://eprocure.gov.in/eprocure/app.

7. Inspections and Tests

The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser.

The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.

Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.

The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

Nothing in GCC Clause 7 shall in any way release the Supplier from any warranty or other obligations under this Contract.

8. Consequences of rejection

If in the event the stores are rejected by the purchaser at the destination and the supplier fails to make satisfactory supplies within the stipulated period of delivery, the purchaser will be at liberty to:

- (a) Allow the supplier to resubmit the stores in replacement of those rejected, within a specified time without any extra cost to the purchaser or
- (b) Reject the material, which shall be final and binding on the contractor.
- (c) Procure the rejected materials of comparable quality from the open market/Govt. stores and the supplier shall be liable to pay the difference in price over the RC prices or get the amount adjusted from the outstanding bills of the supplier or EMD, if any.

9. Packing

The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

The Supplier shall make **delivery and installation** of the Goods within **5 months** from the placement of purchase order in pursuance of the notification of award. However, the supplier shall also arrange to execute all orders on priority basis which would be placed to meet any emergent requirements.

In case the purchaser decides to conclude parallel rate contracts, then the requirements would be split on different firms on an equitable basis as per the discretion of the purchaser.

The delivery of Stores shall be affected at the premises of the Institute free of all delivery charges and within the stipulated time and as may be elucidated in the confirmed order, accompanied by a delivery challan. No extension of time for delivery of Stores shall normally be accorded.

The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

- 1. 3 Copies of the Supplier invoice showing contract number, goods' description, quantity unit price, total amount;
- 2. Installation Certificate
- 3. Insurance Certificate if applicable;
- 4. Manufacturer's/Supplier's warranty certificate;
- 5. Inspection Certificate issued by the nominated inspection agency, if any
- 6. Supplier's factory inspection report; and
- 7. Certificate of Origin (if possible by the beneficiary);
- 8. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

Time and date of delivery – the essence of the contract: The time for and the date of delivery of the stores stipulated shall be deemed to be of the essence of the contract and delivery must be completed not later than the date(s) specified.

11. Insurance

The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers of the value of the goods on "all risks" basis.

12. Transportation

Where the Supplier is required under the Contract to transport the Goods within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the contract Price.

13. Warranty

The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in India.

This warranty shall remain valid for at least **60 months** (or as specified) after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, unless specified otherwise. The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall with all reasonable speed, repair or replace the defective Goods or parts thereof, without any extra cost to the Purchaser. If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

14. Payment

The payment shall be made 100% payment against Supply, Installation and Commissioning and submission of satisfactory PBG.

The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the contract.

15. Prices

Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in his bid. The bidder must mention the applicable taxes/duty and exemptions thereon, if any, as per the Government of India norms. The Institute will provide requisite certificate, if any, required by the bidder as per the applicable Govt. of India norms.

16. Change Orders

The Purchaser may at any time, by written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

- (a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) The method of shipping or packing;
- (c) The place of delivery; and/or
- (d) The services to be provided by the Supplier.

If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

17. Contract Amendments

Subject to GCC Clause 16, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

18. Assignment

The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

19. Subcontracts

The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

20. Delays in the Supplier's Performance

Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser as per GCC clause 10.

If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.

Except as provided under GCC Clause 23, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clause 21, unless an extension of time is agreed upon pursuant to GCC Clause 20.2 without the application of liquidated damages.

21. Penalty

Subject to GCC Clause 23, if the Supplier fails to deliver and install any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 1% per week and the maximum deduction is 10% of the contract price of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 22.

22. Termination for Default

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 20; or
- (b) If the Supplier fails to perform any other obligation(s) under the Contract.
- (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

'For the purpose of this Clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution etc. as per GOI norms.

"Fraudulent practice: a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;" etc. as per GOI norms.

In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 22.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess

costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

23. Force Majeure

Notwithstanding the provisions of GCC Clauses 20 & 21, the Supplier shall not be liable for imposition of liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

24. Termination for Insolvency

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without Compensation to the Supplier provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

25. Termination for Convenience

The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices.

26. Resolution of Disputes

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified below. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.

In case of Dispute or difference arising between the Purchaser and a supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996 as amended from time to time.

27. Governing Language

The contract shall be written in English language. Subject to GCC Clause 28, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

28. Applicable Law

The contract shall be governed by the Law of Contract for the time being in force.

Irrespective of the place of delivery, the place of performance or place of payment under the contract,

the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.

Jurisdiction of Courts: The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of this contract.

One month notice will be given by either party for termination of Contract during the tenure of Contract for breach of Clause or otherwise.

29. Taxes and Duties

Suppliers shall be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

Further, if required the Institute will make direct payment to the Custom Department against receipt of Challan from the supplier.

30. Performance Security:

- (i) Successful bidder have to furnish 5% of the order value as a performance security in the shape of Fixed Deposit Receipt / Bank Guarantee in favour of the Registrar, Indian Institute of Technology (BHU) valid for a period of 60 days beyond the end of all warranty period / obligations (i.e. must valid for 62 months). Fixed Deposit Receipt / Bank Guarantee should be issued from a schedule bank in India.
- (ii) Earnest Money Deposit, if any, will be refunded to the successful bidder on receipt and verification of Performance Security.

31. Supplier Integrity

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

The Institute Reserves The Right To:

- 1. Reject the quotation in absence of not furnishing the documentary evidence in respect of Trade Tax Registration (G.S.T), Income Tax and Trade Tax clearance certificates together with the performance of supplies in various branches/institutions.
- **2. Quantity Variation**: If required, as per Govt. of India rules/guidelines.
- 3. Reject the quotation in the event of non-furnishing the authentic documentary evidence in respect of Testing reports / Performance report of the concerned Govt. Organization / Institutions about the products being manufactured and marketed. The performance test of the product can be conducted at Institute level also for which charge will have to be borne by the suppliers.
- 4. Reject the supplies already made, if not found up to the mark. Thorough checking may be adopted to test the correctness of the supply. In such an event further action may call to conform or discard the supply.
- 5. To reject any addition/alteration in respect of local dealerships intimated by the Principals after consideration of the case by the committee appointed by the Institute for the purpose.
- **6.** Cancel this Tender at any point of time without assigning any reason thereof.
- 7. The Institute also reserves the right to reject the bid of any participated bidder
- **8.** The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:
 - (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the Purchaser.
 - (b) If the Supplier fails to perform any other obligation(s) under the Contract.
 - (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- **9.** To reject any or all the offers without assigning any reasons thereof.
- 10. All disputes are subject to "Varanasi Jurisdiction" only.
- 11. The decisions of the Institute in all respects shall be final and binding on all.
- 12. The Institute reserves the right to ask the successful bidder to produce all the original documents submitted along with the bids for verification at any point of time. During the verification of the document, if it is found that the bidder has concealed/falsified/fabricated any information, the bid and/or purchase order will be cancelled and EMD, if any and/or performance security will be forfeited and action including blacklisting will be taken against the bidder as per norms of the Institute.
- 13. Please ensure that your offer is complete in all respect as no further clarifications shall be sought from you and reaches us within the last date mentioned above. The Institute shall not be responsible for any delay etc.

Chairperson
Campus Surveillance System
Institute Purchase Cell
Indian Institute of Technology
(Banaras Hindu University)
Varanasi-221005

NOTE: 1- While arranging the Tender Documents, check list should be placed on TOP.

SECTION 4: SPECIAL CONDITIONS OF CONTRACT

(to be defined by the Purchaser as per the requirement)

1. Essential Pre Bid Criteria (Mandatory requirements from the bidders)

A bid will be disqualified if any of the criteria provided in I-XIII is not fulfilled. Bidders are required to upload the supporting documents for each of the following points under cover 1.

	quired to upload the supporting documents for each of the following points under cover 1.								
Sl. No.	Eligibility Requirement	Supporting Documents/ Required							
1	The bidder should be a company registered under the Companies Act, 1956/2013 or a partnership firm registered under Indian Partnership Act 1932 or Limited Liability Partnership Act 2008 with registered office in India and in operation for at least 10 years as on 31.03.2024	Registration							
	The bidder should be a single legal entity/ individual organization. Consortium shall not be allowed	Undertaking signed by authorized signatory must be provided							
3	The bidder must have executed One similar Order of Rs. 8 Crores or Two similar orders of Rs. 5 Crores of total project value of CCTV Surveillance, in last five years in one of any IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/Govt. Research Organizations/Government Offices/PSUs directly with minimum 100 outdoor CCTV cameras setup. The order(s) must be directly in favor of the bidder only.	Order Copy along with Certified copies of successful work execution certificate to be submitted as proof							
	The bidder must have a valid manufacturer authorization certificate for this specific Tender by clearly mentioning the Tender Ref. No. and Name of Tender issued from OEMs of CCTV, Switches, UPS etc								
5	The Bidder should have an average annual turnover of Rs. 25 Crore or more during the last 3 financial years								
6	Bidder must have all below certifications a) ISO 9001:2008/ ISO 9001:2015 for Quality Management System or latest b) ISO 20000:2011 for IT Service Management or latest c) ISO 27001:2013 for Information Security Management System or latest d) CMM Level 3 or more certified company	Copies of the valid certificates from authorized agencies							
	· · ·	Profit/Loss Account should be enclosed along with CA certificate clearly specifying the net worth of the firm							
	A notarized affidavit on a Non-Judicial stamp of Rs 100 by the bidder that it has never been black-listed by any IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs								
9	The bidder should be registered with the GST Department and should carry a valid PAN in the name of the Company. A copy of Income tax clearance								

	certificate, proof of manufacturing unit/ dealership letter/	
	general order suppliers, PAN card, and copy of GST	
	registration certificate	
10	Certificate as per Annexure-V, VI, VII and VIII on the	Certificates
	letterhead of the company must be uploaded.	
11	Adherence to all specifications is compulsory	Certificates
12	The Bidder must agree to give presentation and	Undertaking to be submitted in Annexure
	demonstrate the Proof of Concept as part of Technical	VIII format
	Evaluation for their quoted make and models including	
	compatibility with the existing network infrastructure of	
	the institute. To evaluate the offered solution/products,	
	POC will be conducted by a technical committee. POC	
	date(s) will be intimated separately to prospective	
	bidders	

NOTE: THE BID OF THOSE BIDDERS WHO FAILS TO COMPLY THE ABOVE ESSENTIAL CRITERIA WILL NOT BE CONSIDERED FOR TECHNICAL EVALUATION.

2. Documents Comprising the Bid

The tender/Bid shall be submitted online in two parts, viz., Technical Bid and Commercial Bid.

I. Technical Bid

The following documents are to be scanned and uploaded as part of the Technical Bid as per the tender document:

- (a) Scanned copy of Tender Forms (Techno Commercial Un-Priced Bid), Declaration, and Tender Acceptance Letter;
- (b) Scanned copy of proof for submission of Tender Document Fee/ Earnest Money Deposit/ Declaration Form as per as per Annexure-VII/Exemption Certificate, if any etc.;
- (c) Scanned copy of written confirmation authorizing the signatory of the Bid to commit the Bidder;
- (d) Scanned copy of quoted product brochure
- (e) Scanned copy of completely filled Annexure III with supporting documents
- (f) Scanned copy of Technical Bid and essential Pre-bid Details, if any.
- i. Scanned copy of documentary evidence establishing the Bidder's qualifications to perform the contract if its bid is accepted and the Bidder's eligibility to bid;
- ii. Scanned copy of documentary evidence, that the Goods and Related Services to be supplied by the Bidder are of eligible origin and conform to the Bidding Documents, and
- (g) Scanned copy of Checklist, compliance of Essential pre-bid criteria and Technical Compliance Sheet (Annexure II) and any other document required as per the tender;
- (h) Certificate as per Annexure V, VI, VII and VIII.

II. Commercial Bid

The commercial bid comprises of:

- (i) Scanned copy of Tender Form (Price Bid)
- (ii) Price bid in the form of .xls format and to be uploaded in .xls & signed copy to be uploaded in .pdf format.

The Price bid format is provided as .xls format along with this Tender Document at http://eprocure.gov.in/eprocure/app. Bidders are advised to download this .xls format and quote their offer/rates in the prescribed column.

In addition to the above requirements, bids submitted by a Joint Venture shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement, there to.

The Bidder shall furnish in the Tender Forms information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

3. Installation & Demonstration

The supplier is required to complete the installation and demonstration of the equipment within **two** weeks of the arrival of materials at the IIT (BHU) site of installation, otherwise the penalty clause will be the same as per the supply of materials.

In case of any mishappening/damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. IIT (BHU) will not be liable to any type of losses in any form.

4. Application Specialist

The Tenderer should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office.

5. Spares

The Manufacturer/Supplier is required to provide state availability of spares for ten years, if required.

6. Training of Personnel

The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.

7. User List

The bidder must provide the list of users where they have deployed similar nature of equipment during 1st April 2021 to 31st March 2024 years in prescribed format of Annexure III.

8. Manuals/Documents

1 set of hard copy and 1 set of soft copy in English (preferred as following).

- i. Operating manual
- ii. Servicing & Maintenance manual
- iii. Spare parts list with source of supply and prices
- iv. Pre-installation requirements.

9. Services

Bidders must submit Factory Acceptance Test procedures supported with relevant printed literature and certificates.

- **10.** The Tender document should also indicate what kind of service/maintenance is required for the system. Whether this service has to be carried out by a company engineer or it can be carried by trained service personnel within India. The frequency of visit and the charges should be mentioned.
- 11. The Tender should be enclosed with proper certifications like **Authorization Certificate** and **Proprietary Certificate** (in case of Proprietary items).
- 12. Pre-installation site preparation/inspection requirements to be indicated and specified along with the bid.
- **13.** Bid should include FOR, IIT(BHU), Varanasi prices. The Institute will provide requisite certificate, if any, required by the bidder as per the applicable Govt. of India norms.
- **14.** The Bidder to provide compliance statements with respect to each technical specification in the tender document duly supported by the manufacturer's literature. Any other claim will not be accepted and may lead to rejection of the bid.

- **15.** Printed literature in support of compliance to the prescribed specifications is to be submitted.
- **16.** Compliance report needs to be submitted as a part of the technical bid.
- 17. The Institute will provide Custom Duty Exemption Certificate as and when required.
- 18. Bidders should confirm their acceptance as per OM No. F.7/10/2021-PPD(1) Ministry of Finance, Govt of India dated 23.02.2023 on the subject Restrictions under Rule 144(xi) of the General Financial Rules (GFRs), 2017.
 - I. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent authority.
 - II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
 - III. "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means:
 - a) An entity incorporated, established or registered in such a country; or
 - b) A subsidiary of an entity incorporated, established or registered in such a country; or
 - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d) An entity whose beneficial owner is situated in such a country; or
 - e) An Indian (or other) agent of such an entity; or
 - f) A natural person who is a citizen of such a country; or
 - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
 - IV. The beneficial owner for the purpose of (iii) above will be as under:
 - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

- a) "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
- b) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. [To be inserted in tenders for Works contracts, including Turnkey contracts] The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.
- VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.
- VIII. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution

The bidder is required to submit a certificate in this regard in Annexure VI. If the certificate submitted by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law.

- 19. If the bidder is a Micro or Small Enterprise/Start-up, they shall be exempted from the requirements of submission of "Tender Processing fees", "EMD", "Bidder Turnover" criteria subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Tender Processing fees/EMD/ Turnover, the presently valid supporting documents, as applicable to prove his eligibility for exemption, must be submitted for evaluation. Since this tender is related to Campus Surveillance & Security which is a Critical Security Operations where only experienced bidders are required. Therefore, the Committee resolved that the criteria of Prior Experience shall not be relaxed for MSEs/Startups in light of OM No. No .F .20 12 fi20 1 4-PPD(Pt.) dated 16.09.2016 of Public Procurement Division, Ministry of Finance Relaxation of Norms for Startups Medium Enterprises in Public Procurement regarding Prior Experience Prior Turnover criteria.
- 20. It is mandatory for bidders to quote items having local content minimum 20%. Refer revised Public Procurement (Preference to Make in India), Order 2017, No. P-45021/2/2017-PP (B.E-II) Part(4) Vol II dated 19.07.2024 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. (Submit duly filled Annexure VII for the same). The Annexure VII once submitted in the Technical Bid will be final. Submission of Revised Annexure VII will NOT be accepted. Bidders offering Imported products will fall under the category of Non_Local Suppliers. They cannot claim themselves as Class-I or Class –II Local Suppliers by claiming the services such as Transportation, Insurance, Installation, Commissioning, Training and After Sale Service Support like AMC/ CMC etc. as Local Value Addition.
- **21.** The bidders are required to make sure that the offered products are in compliance with OM No. No. IV-24011/22/2020-Prov-I/270 dated 26.04.2024 of Ministry of Home Affairs, Govt of India forwarding thereby MeitY's communications regarding CCTVs. This includes the followings:
 - (i) Gazette Notification dated 06 March, 2024 on the amendments to Public Procurement Order (PPO)-2017 for CCTV/ Video Surveillance Systems for Security, Ministry of Electronics and Information Technology (IPHW DIVISION), THE GAZETTE OF INDIA: EXTRAORDINARY [PART II—SEC. 3(ii)]
 - (ii) Gazette Amendment notification dated 09 April, 2024 to the Electronics and information Technology Goods (Requirement of Compulsory Registration) Order, 2021, Ministry of Electronics and Information Technology (IPHW DIVISION), THE GAZETTE OF INDIA: EXTRAORDINARY [PART II—SEC. 3(ii)]
 - (iii) OM no. W-43/11/2021-1PHW dated 11 March, 2024, Advisory on the Threat of Information through CCTV/Video Surveillance system, Ministry of Electronics and Information Technology (IPHW DIVISION).
- **22.** Bidders must adhere to the revision in Rules and Procedures in respect of IoT System Certification Scheme (IoTSCS) notified vide OM F.No. STQC/IT&eGov/IoTSCS/001 dated 22.05.2024 of STQC Directorate, Ministry of Electronics and Information Technology, New Delhi.
- **23. Defective Equipment:** If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise

faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 30 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IIT (BHU) may consider "Banning" the supplier.

IMPORTANT NOTE:

- 1. Non-compliance of tender terms, non-uploading of required documents, lack of clarity of the specifications, contradiction between bidder specifications and supporting literature etc. may lead to rejection of the bid.
- 2. In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
- 3. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

All documents in support of above essential pre-bid criteria shall be scanned and uploaded under cover 1.

<u>SECTION 5 : CHECKLIST FOR BID/TENDER SUBMISSION</u>
(The following check-list must be filled in and submitted with the bid documents)

Sl. No.	Particulars	Yes/No				
1	Have you mentioned the page no. and authorized signatory signature on each page of your bid document.					
2	Have you attached the techno commercial unpriced bid form duly filled in appropriately?					
3	Have you attached a copy of the last audited balance sheet of your firm as per tender requirement					
4	Have you attached the details of the income tax clearance certificate, proof of manufacturing unit/ dealership letter/ general order suppliers and copy of GST registration certificate?					
5	Have you executed the similar nature of work during 2023-24, 2022-23, 2021-22 in IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs					
6	Have you attached the copies of relevant work orders from IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs in prescribed Format?					
7	EMD: Have you submitted EMD asked for.					
8	Have you submitted samples of all items indicated in the respective schedule of requirements at the address of tender inviting authority within due date.					
9	Have you enclosed the schedule of requirement indicating the make offered without indicating the pricing components along with the techno commercial unpriced bid?					
10	Have you submitted the bids both techno commercial unpriced and priced bid separately for each tender?					
11	Have you enclosed the statement of deviations from financial terms and conditions, if any?					
12	Have you submitted the Technical Compliance Sheet?					
13	Have you attached Manufacturer's Authorization certificate for this Tender?					
14	Have you attached the Declaration on the letter pad of Bidder?					
15	Have you attached the compliance of Pre-qualification criteria?					
16	Have you attached the signed Tender acceptance letter?					
Price Bid						
1	Have you signed and attached the priced bid form?					
2	Have you attached the schedule of requirements duly priced i.e BoQ in both .xls format and in .pdf format					

COMPLIANCE SHEET OF ESSENTIAL PRE BID CRITERIA

Sl.	Essential Pre Bid Criteria	Compliance	Page No.
No	Essential Tre Bid Criteria	Comphanec	age 110.
1	The bidder should be a company registered under the Companies Act, 1956/2013 or a partnership firm registered under Indian Partnership Act 1932 or Limited Liability Partnership Act 2008 with registered office in India and in operation for at least 10 years as on 31.03.2024		
2	The bidder should be a single legal entity/ individual organization. Consortium shall not be allowed		
3	The bidder must have executed One similar Order of Rs. 8 Crores or Two similar orders of Rs. 5 Crores of total project value of CCTV Surveillance, in last five years in one of any IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs directly with minimum 100 outdoor CCTV cameras setup. The order(s) must be directly in favor of the bidder only.		
4	The bidder must have a valid manufacturer authorization certificate for this specific Tender by clearly mentioning the Tender Ref. No. and Name of Tender issued from OEMs of CCTV, Switches, UPS etc		
5	The Bidder should have an average annual turnover of Rs. 25 Crore or more during the last 3 financial years ending FY 2024, i.e., 2021-22, 2022-23, 2023-24		
6	Bidder must have all below certifications a) ISO 9001:2008/ ISO 9001:2015 for Quality Management System or latest b) ISO 20000:2011 for IT Service Management or latest c) ISO 27001:2013 for Information Security Management System or latest d) CMM Level 3 or more certified company		
7	Bidders must have positive net worth and should be profit making in each of the last 3 financial years.		
8	A notarized affidavit on a Non-Judicial stamp of Rs 100 by the bidder that it has never been black-listed by any IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs		
9	The bidder should be registered with the GST Department and should carry a valid PAN in the name of the Company. A copy of Income tax clearance certificate, proof of manufacturing unit/ dealership letter/ general order suppliers, PAN card, and copy of GST registration certificate		
10	Certificate as per Annexure-V, VI, VII and VIII on the letterhead of the company must be uploaded.		
11 12	Adherence to all specifications is compulsory The Bidder must agree to give presentation and demonstrate the Proof of Concept as part of Technical Evaluation for their quoted make and models		
	including compatibility with the existing network infrastructure of the institute. To evaluate the offered solution/products, POC will be conducted by a technical committee. POC date(s) will be intimated separately to prospective bidders		

SECTION 6

<u>DECLARATION</u>
(On the letter head of the firm submitting the bid)

1.	I, Son /Daughter of Shri
	Proprietor/ Partner/ CEO /MD/ Director/ Authorized Signatory of M/s
	am competent to sign this declaration and execute this tender document.
2.	I have carefully read and understood all the terms and conditions of the tender and hereby convey my
	acceptance of the same.
3.	The information/ documents furnished along with the above application are true and authentic to the
	best of my knowledge and belief.
4.	I/ we/ am well aware of the fact that furnishing of any false information/ fabricated document would
••	lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate
	law.
5.	Each page of the tender document and papers submitted by my Company is authenticated, sealed and
	signed, and I take full responsibility for the entire documents submitted.
<u> </u>	This is contified that our augmination has been outhorized (Conventioned) by the OEM to nonticinate
6.	This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid
	down in this tender document. Moreover, OEM has agreed to support on regular basis with
	technology / product updates and extend support for the warranty.
7	The prices quoted in the price bids are subsidized due to academic discount given to IIT (BHU),
, •	Varanasi.
0	
8.	We, further specifically certify that our our organization has never been Black Listed/De Listed or put to any Holiday by any IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State
	Govt. University/ Govt. Research Organizations/Government Offices/PSUs till date.
Sic	gnature of the Authorized Person
DI;	gnature of the Authorized Leison
Da	rte: Full Name
Pla	ace: Company Address with Seal

SECTION 7

TENDER FORM

(Techno commercial un-priced Bid)

(On the letter head of the firm submitting the bid)

Tender No.	
То	
The Chairperson	
Campus Surveillance System	
Institute Purchase Cell	
Indian Institute of Technology	
(Banaras Hindu University)	
Varanasi-221005	

Dear Sir,

- 1. I/We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders;
- 2. I/We meet the eligibility requirements and have no conflict of interest;
- 3. I/We have not been suspended nor declared ineligible in India;
- 4. I/We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: [insert a brief description of the Goods and Related Services];
- 5. I/We offer to supply the items as listed in the schedule to this tender hereto/portion thereof as you may specify in the acceptance of Tender at the price given in the said Schedule and agree to hold this offer open for a period of days from the date of opening of the tender.
- 6. I/we shall be bound by a communication of acceptance issued by you.
- 7. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
- 8. Details of submitted EMD has been enclosed.
- 9. The following have been added to form part of this tender.
 - (a) Schedule of requirements, quoting the make only duly signed and stamped.(without indicating price)
 - (b) Income Tax clearance certificate.
 - (c) Copy of last audited balance sheet.
 - (d) Copy of Valid GST registration certificate.
 - (e) Copy of similar relevant major purchase orders executed during 2021-22, 2022-23, 2023-24 in IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs.
 - (f) Proof of manufacturing Unit, dealership certificate/general order suppliers.
 - (g) Statement of deviations from financial terms & conditions, if any.
 - (h) Any other enclosure. (Please give details)

- 10. We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.
- 11. Certified that the bidder is:

E-mail

(a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor,

Or

(b) A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

(c) A company and the person signing the document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariable be duly attested by the person authorized to sign the bid document).

- 12. We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.
- 13. If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;
- 14. We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process, other than alternative bids submitted;
- 15. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption

Name of the Bidder*
Name of the person duly authorized to sign the Bid on behalf of the Bidder**
Title of the person signing the Bid
Signature of the person named above
Date signed day of
* In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder ** Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules. Yours faithfully,
(Signature of bidder with company seal)
Dated this day of
Address:
Telephone No. : FAX

TENDER FORM

(Priced Bid)

(On the letter head of the firm submitting the bid document)

To.

The Chairperson Campus Surveillance System Institute Purchase Cell Indian Institute of Technology (Banaras Hindu University) Varanasi-221005

Ref:	Tender No	 Dated:	

Sir.

Having examined the bidding documents and having submitted the techno commercial unpriced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

- 1. We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of requirement.
- 2. We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.
- 3. The prices quoted are inclusive of all charges net FOR, IIT(BHU) Varanasi and should be mentioned clearly. We enclose herewith the complete Financial Bid as required by you. This includes:
- a. Price Schedule (Bill of Quantity-BOQ).
- b. Statement of deviations from financial terms and conditions.
- 4. We agree to abide by our offer for a period of 365 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.
- 5. We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.
- 6. We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]

Nam	Name of Recipient		A	Address			Reason			Amount		
(If	none	has	been	paid	or	is	to	be	paid,	indica	ite '	"none.")

- 7. We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- 8. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/ constituted attorney of sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney,

Or

A company and the person signing the bid document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document.)

We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of
Signature of Bidder
Details of enclosures
Full Address:
Telephone No.
Mobile No.:
Fax No.:
E-mail:
Company Seal:

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

Ca Ins Ins (B	The Chairperson Campus Surveillance System Institute Purchase Cell Indian Institute of Technology Banaras Hindu University) Varanasi-221005								
Su	b: Acceptance of Terms & Conditions of Tender.								
Te	nder Reference No								
TF	nme of Tender/ Work: ENDER FOR SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND AINTENANCE OF CCTV CAMPUS SURVEILLANCE SYSTEM AT IIT (BHU) VARANASI								
De	ear Sir,								
1.	I/We have downloaded/ obtained the tender document(s) for the above mentioned 'Tender/Work'								
	from the web site(s) namely: as per your advertisement, given in the								
	above mentioned website(s).								
2.	I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from								
	Page Noto(including all documents like section(s),								
	schedules(s) etc.), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/ clauses contained therein.								
3.	3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.								
4.	I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s) corrigendum(s) in its totality/entirety.								
5.	In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.								
Yo	ours faithfully,								
(Si	gnature of the Bidder, with Official Seal)								

FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)/ PERFORMANCE SECURITY

(TO BE ESTABLISHED THROUGH ANY OF THE **NATIONALISED COMMERCIAL BANKS OF INDIA** (WHETHER SITUATED AT VARANASI OR OUTSTATION WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT VARANASI)

To, The Registrar, Indian Institute of Technology (BHU), Varanasi-221005

LETTER OF GUARANTEE

SCHEDULE OF REQUIREMENTS

I. TECHNICAL SPECIFICATIONS

TENDER FOR SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND MAINTENANCE OF CCTV CAMPUS SURVEILLANCE SYSTEM AT IIT (BHU) VARANASI

Sr. No	Name and Description	Quantity	Units	Whether provided is complied with the given specification (Yes / No)
1	Outdoor/Indoor VF Dome Camera Supply, Installation, Testing & Commissioning of 5MP IP Network TDN Low-Light IR Rugged Dome Camera, 1/2.8" CMOS or better, 5MP (2592 x 1944) @ 25fps or better, triple stream at various resolution & Frame Rates, Min. Illumination required 0.005 lux @ F1.6 (color), 0 Lux IR On, 4 IR LEDs Smart IR with upto 50m IR distance, Auto ICR (Infrared Cut Filter) 120dB True WDR, S/N Ratio 50db, Shutter Speed 1/8 - 1/30,000; Advance Video Compression technology such as H.265 & H.264 High Profile & MJPEG, Triple stream, 2.7 to 13.5mm 5X motorized focus & zoom lens, Field of View FoV H:96°-26°, BLC, HLC, 3DNR White Balance, Minimum Edge Intelligence Video Analytics: Video Motion Detection, Tampering, Loitering, Intrusion, & People Counting, 4 Privacy Mask, 8 Region Of Interest, Defog, TLS1.2, AES-128/256, SSH/Telnet closed, Stream Encryption, Dual channel Audio, Alarm: 1In/ 1out, 256GB SD card support, PoE (802.3 af) and 12V DC, Max 6W, IP 66, IK 10 vandal proof with Die Cast Aluminium Housing, Having Operating temp range: —40°C to 60° C. Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.		Nos	
2	SITC of Network Video Recorder Software License for Primary & Failover (N+1) for 320 Cameras. Supply, Installation, Testing & Commissioning of Network Video Recording Software (Recording Licenses), Shall support min 320 Cameras with 5 MP Resolution, 25fps with N+1 Redundancy. NVR shall support UHD, 4K, Full HD resolution, H.265 compression codec, multi-imager/lens cameras and 360° fisheye cameras. The NVR shall support in N+1 failover features so that more failover can be added if required. NVR shall be licenced for 320 cameras & 04 users clients with 128 Camera Failover and camera and Client should be upgradable in future as per client requirement. The NVR should support network joystick controller, GPU rendering support for H.264 and H.265 decoding, video on demand, Adaptive video throttling, rule engine, operator role management, server based Video Motion Detection (VMD), edge storage backfill support, bookmark with manual comment, bookmark based search, timeline search, Preview search, synchronous playback, monitor wall support, surrounding camera mode, Cyber secured with features such as Digital Signing, General Data Protection Regulation (GDPR) compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones,		Set	

	seamless integration with integrated Access Control System. NVR			
	Shall be listed on ONVIF website for ONVIF S, G & T support compliance.			
3	SITC of Video Management Software for 320 Cameras along with Client License(8 No's).	1	Set	
	Supply, Installation, Testing & Commissioning of ONVIF Certified Network Video Management Software (VMS) system required to support min 500 Cameras for Central Monitoring and Control on need basis as and when required. VMS support UHD, 4K, Full HD resolution, H.265 compression codec, multi-imager/lens cameras and 360° fisheye cameras. The VMS shall have option to support failover features if required in future. VMS shall be licenced for 320 cameras & 4 users clients expandable beyond in the same hardware server to support 2000 cameras and 25 User Clients. The VMS should support network joystick controller, GPU rendering support for H.264 and H.265 decoding, video on demand, Adaptive video throttling over network for Live Video, rule engine, operator role management, server based Video Motion Detection (VMD), edge storage backfill support, bookmark with manual comment, bookmark based search, timeline search, Preview search, synchronous playback, monitor wall support, surrounding camera mode, Cyber secured with features such as Digital Signing, General Data Protection Regulation (GDPR) compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones, seamless integration with integrated Access Control System.			
4	SITC of 8 Port PoE Switch with 2 Port Fiber.	65	Nos	
	General Features: Switch should be 1U and rack mountable in standard 19" rack. Switch should have minimum 2GB RAM and 4GB Flash. Performance: Switch shall have minimum 60 Gbps of switching fabric and 44 Mpps of forwarding rate. Should be non-blocking and provide wire speed forwarding rate. Switch shall have minimum 32K MAC Addresses and 4000 VLAN IDs Should support minimum 10K IPv4 routes or more Switch shall have 1K or more multicast routes. Switch should support atleast 16K flow entries Switch should support atleast 16K flow entries Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.1ae, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, REP, PIM, OSPF, VRRP, PBR and QoS features from Day1. Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs. Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+. General Features: Switch should be 1U and rack mountable in standard 19" rack. Switch should have minimum 2GB RAM and 4GB Flash. Performance: Switch shall have minimum 2GB RAM and 4GB Flash. Performance: Switch shall have minimum 2GB RAM and provide wire speed			

	forwarding rate.			
	Switch shall have minimum 32K MAC Addresses and 4000 VLAN			
	IDs			
	Should support minimum 10K IPv4 routes or more			
	Switch shall have 1K or more multicast routes.			
	Switch should support atleast 16K flow entries.			
5	SITC of 24 Port PoE Switch with 4 port Fiber.	1	Nos	
	(for Satish Dhawan Hostel)			
	Functionality:			
	Switch should support IEEE Standards of Ethernet: IEEE 802.1D,			
	802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3,			
	802.1ae, 802.3u, 802.3ab, 802.3z.			
	Switch must have functionality like static routing, RIP, REP, PIM,			
	OSPF, VRRP, PBR and QoS features from Day1.			
	Switch should support internal field replaceable unit redundant power			
	supply from day 1.			
	Switch should have minimum 2 GB RAM and 2 GB Flash.			
	Switch should have dedicated slot/Ports for modular stacking, in			
	addition to asked uplink ports. Should support for minimum 80 Gbps			
	of stacking thoughput with 8 switch in single stack.			
	Performance:			
	Switch shall have minimum 128 Gbps of switching fabric and 95			
	Mpps of forwarding rate.			
	Switch shall have minimum 16K MAC Addresses and 250 active			
	VLAN.			
	Should support minimum 11K IPv4 routes or more			
	Switch shall have 1K or more multicast routes.			
	Switch should support atleast 16K flow entries			
	Switch should support 128 or more STP Instances.			
	Switch should have 6MB or more packet buffer.			
	Functionality: Switch should support IEEE Standards of Ethernet: IEEE 802.1D,			
	802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3,			
	802.18, 802.14, 802.13, 802.3au, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.			
	Switch must have functionality like static routing, RIP, PIM,			
	OSPF(1000 routes), VRRP, PBR and QoS features from Day1			
	Switch should support network segmentation that overcomes the			
	limitation of VLANs using VXLAN and VRFs.			
	Switch shall have 802.1p class of service, marking, classification,			
	policing and shaping and eight egress queues.			
	Switch should support management features like SSHv2, SNMPv2c,			
	SNMPv3, NTP, RADIUS and TACACS+.			
	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping,			
	IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery			
	Inspection and IPv6 Source Guard.			
	Switch should support 802.1x authentication and accounting, IPv4 and			
	IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on			
	hardware for all ports.			
	Switch must have the capabilities to enable automatic configuration of			
	switch ports as devices connect to the switch for the device type.			
	Interfaces			
	Switch shall have 24 nos. 10/100/1000 Base-T PoE ports and			
	additional 4 nos. SFP+ uplinks ports.			
	All 24 port should support PoE (802.3af) and PoE+ (802.3at) with a			
	PoE power budget of 370 W.			
	Certification:			
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN			
	60950 Standards for Safety requirements of Information Technology			
	Equipment.			
	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B			
	or CE Class A/B or FCC Class A/B Standards for EMC (Electro			
	Magnetic Compatibility) requirements.		<u>I</u>	

	Switch / Switch's Operating System should be tested for EAL 2/NDPP			
	or above under Common Criteria Certification.			
	OEM should be listed in Gartner Leader Quadrant for Wired and			
	Wireless LAN Infrastructure from last 3 years before releasing this			
	RFP.			
_				
6	SITC of 1G SFP Transceiver.	132	Nos	
	Specifications			
	Speed 1Gbps			
	Single Mode			
	SFP should be compatible with the offered equipments			
	Distance: 10KM			
7	SITC of OFC Patch Cord Duplex (3 Mtrs).	132	Nos	
	1 , , ,			
	Features: LC-LC Duplex Small diameter, light weight, easy to connect			
	and support large capacity data transmission.			
	,			
	Supplied on 2mm Zipcord duplex cable that reduces cable congestion,			
	allows for greater finger access in patching areas, and improves			
1				
1	airflow around active equipment.			
1	Fiber Count:			
	<u> </u> 2			
	Coordon Duffer OD			
	Secondary Buffer OD:			
	$900 \pm 50 \mu m$		1	
	Aramid Yarn:			
	Aramid Yarns acting as strength member to protect the fiber cores.			
	Outer jacket OD:			
	2.00 mm x 4.00mm (Duplex Zip Cord)			
	Minimum bending radius(mm): 20xD			
	Operating Temperature:			
	-20 °C to +60 °C			
	Return Loss			
	>= 55dB			
	Optical Specification:			
	Fiber Mode			
	SM, OS2			
	Insertion Loss:			
	≤ 0.30 dB			
	Length			
	3 Mtr.			
	OEM Eligibility:			
	OEM should have manufacturing unit in India for at-least 5 years or			
	more. Should have Indian Technical Support Centre, Warehouse and		1	
	RMA center in India.			
	ATT TO THE STATE OF THE STATE O			
	All passive products from single OEM & should be manufactured as			
	per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel			
	performance.		1	
1				
	OEM should be a member of TIA organization.		1	
1]	
8	SITC of 6 Port LIU (Fully Loaded).	65	Nos	
o o	DITO OF OTT LITO (Fully Loaucu).	0.5	105	
			1	
	Type:			
1				
1	6 Port Single Mode Full Loaded LIU			
	LIU:			
	Standard 19" Rack mountable with 6 Port LC Fiber Pigtails and			
	accessories for installation and commissioning.			
	Application			
	Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data			
	communication, Data centers, premise installations and Indoor			
	Application			
1	Fiber Count:			
1	6		1	

	h		1	ı
	Loaded with Pigtails:			
	LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer			
	Material:			
	Steel			
	Loaded with Couplers:			
	LC Duplex Couplers			
	Accessories Loaded in Panel:			
	12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice			
	Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps			
	Optical Characteristics for Loaded Pigtail:-			
	Insertion Loss:			
	<= 0.3 dB			
	Return Loss:			
	>= 55 dB			
	Operating Temperature:			
	-10 °C to $+60$ °C			
	RoHS Compliant:			
	Pigtails Compliant as per RoHS Directive 2011/65/EU, Complies to			
1	ANSI/TIA-568.3-D, IEC 60794-2, ISO/IEC 11801]	
1	OEM Eligibility:		1	
1	OEM should have manufacturing unit in India for at-least 5 years or		1	
1	more. Should have Indian Technical Support Centre, Warehouse and		1	
1	RMA center in India.		1	
1	initi i contoi ili ilidia.			
1			1	
	All passive products from single OEM & should be manufactured as			
	per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel			
	performance.			
	OEM should be a member of TIA organization.			
0		40	NT.	
9	SITC of 9U Weatherproof Junction Box with 500mm Depth.	42	Nos	
	Standard 19" Wall/Pole Mount, 9U with 500mm Depth			
	Panel with ventilation and cable entry facility			
	Provision to mount cooling fans on the top/Side panel			
	Weather Proof level for Outdoor Use.			
	Lockable front Door			
	Power Distribution Units 6 socket 5/15 Amp			
	1U Horizontal Cable Manager			
	Standard Accessories including fans and one Hardware Packet			
	It shall be in compliance with ROHS standards			
10	SITC of 9U Wall Mount Network Rack with 500mm Depth.	28	Nos	
10	STIC of 90 wan Mount Network Rack with Soumm Depth.	28	NOS	
	Standard 19" Wall Mount, 9U with 500mm Depth			
	Top/bottom Panel with ventilation and cable entry facility			
	Provision to mount cooling fans on the top/side panel			
1	Lockable front Door		1	
1			1	
1	Power Distribution Units 6 socket 5/15 Amp		1	
1	1U Horizontal Cable Manager		1	
1	Standard Accessories including fans and one Hardware Packet		1	
1	It shall be in compliance with ROHS standards			
11	SITC of 1KVA UPS with inbuilt Batteries.	65	Nos	
1.1	STIC OF TRAIN OF S WITH INDUITE DUTTERS.	05	1105	
1	Conscitu		1	
1	Capacity:		1	
1	1000VA		1	
	Technology:			
	PWM-MOSFET			
1	Input Range:		1	
1	Single Phase 140 -300 VAC		1	
1			1	
1	Output (AVR Mode):		1	
1	230 +/- 9% 50Hz		1	
1	Output (Battery Mode):			
	230VAC Sine Wave			
1	Battery:		1	
1	12V 7AH SMF-VRLA Batteries 04 Nos inbuilt]	
1				

	THD:			
	Less than 5%			
	Warranty:			
	05 Years on UPS and Batteries both			
	Certificates:			
	ISO 9001, 14001, BIS, CE, Make In India, Test Report			
12	Supply and Laying of 6 Core Armoured Optical Fibre Cable.	8000	Mtrs	
	THE STATE OF THE S			
	Type:			
	6 Core Armored Single mode (9/125μm) Fiber optic Cable suitable for			
	Outdoor application			
	Cable:			
	6 Core Single mode fiber optic cables armored with colored fiber			
	cores. Fiber cable is perfectly suited for both gigabit Ethernet and 10			
	gigabit Ethernet campus and backbone applications.			
	Application:			
	The constructions are of ECCS Tape Armored Uni Tube design with			
	HDPE outer Jacket making it suitable for Outdoor applications			
	Outer Sheath:			
	HDPE Jacket / Black or Yellow			
	Fiber Count: 6			
	Cable Specifications:			
	Fiber Color: Blue, Orange, Green, Brown, Grey, White			
	Cable diameter : 9.2 ± 0.5 mm			
	Crush Resistance:			
	3000 N/100mm			
	Bend Radius:			
	20 X D (mm)			
	Tensile Load (max):			
	2000 N			
	Optical Properties:			
	Cladding Non-circularity : ≤ 0.7 %			
	Cladding Diameter : $125.0 \pm 0.7 \mu m$			
	Core/cladding Concentricity Error : ≤ 0.5 μm			
	Primary Coating Diameter : 250 ± 15μm			
	Attenuation Co-efficient :			
	1310 Wavelength (nm) : $\leq 0.36 \text{ dB/km}$			
	1550 Wavelength (nm) : $\leq 0.22 \text{ dB/km}$			
	Chromatic Dispersion:			
	1285 - 1330 Wavelength (nm) : ≤ 3.5 ps/nm.km (Min)			
	1550 Wavelength (nm) : ≤ 18 ps/nm.km (Min)			
	Temperature Range:			
	Operating Temperature Range: -20°C to +70 °C			
	Compliance Standard:			
	Complies to IEC 60793, IEC 60794 1			
1	RoHS Compliant:			
	Compliant as per RoHS Directive 2011/65/EU			
	OEM Eligibility:			
	OEM should have manufacturing unit in India for at-least 5 years or			
	more. Should have Indian Technical Support Centre, Warehouse and			
	RMA center in India.			
	All passive products from single OEM & should be manufactured as			
	per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel performance.			
	<u> </u>			
12	OEM should be a member of TIA organization.	9000	Mtm	
13	Supply and Laying of 3 Core 1.5 Sqmm Power Armoured Cable.	8000	Mtrs	
	Supply and laying of 2 Come 1.5 Sames DVC Coted 1100 V			
	Supply and laying of 3 Core 1.5 Sqmm, PVC Coted, 1100 V graded			
14	Power cable or as per site requirement	35	Dov	
14	Supply and Laying of CAT6 F/UTP Cable	33	Box	
	Type: CAT6 F/UTP Shielded LSZH Cable			
	8 X 23 AWG solid bare copper Electrolytic Grade Copper Conductors			
L	o A 23 A w G some pare copper Electrorytic Grade Copper Conductors			1

	Twisted as 4 Pairs; Overall Cable Foil Shielded or Better. The twisted			
	pairs are covered with a PVC/LSZH Outer Jacket, Category 6,			
	confirming to ANSI/TIA 568.2-D for Category 6.			
	Support: Supports 10/100/1000Base-T, 155Mbps ATM, IEEE 802.3an			
	(10GBase-T) Standard requirement for Applications such as High-			
	Speed Data, Voice & Video Signals over LANs, Server Farms and			
	Other Bandwidth Sensitive Indoor Applications.			
	Conductors: Solid bare copper 23 AWG			
	Pair Separator			
	+ Shape Spline			
	Packing			
	Box of 305 meters			
	Cable Outer Diameter			
	$7.5 \pm 0.5 \text{ mm}$			
	Insulation Material:			
	Polyolefin			
	Pairing			
	2 insulated conductors twisted together			
	Individual Pair shielding: No			
	Overall Shield:			
	Aluminium Polyester Foil Shielded, 100% Coverage with TC Drain			
	Wire			
	Delay Skew:			
	< 45 ns			
	Conductor Resistance:			
	≤ 95.0 Ω /km @20°C			
	Mutual Capacitance:			
	$\leq 5.6 \text{ nF}/100 \text{ m} @1 \text{KHz}$			
	Resistance Unbalance:			
	5% Max @20°C			
	Capacitance Unbalance:			
	330 pF/100 m			
	Bend Radius:			
	Minimum 8X cable diameter			
	Pulling Force:			
	80N or Better			
	Nom. Velocity of Propagation:			
	67% or Better			
	Temperature Range Operation:			
	-30 °C to +60 °C			
	Flame Properties:			
	Flammability Test : IEC 60332-1			
	Acid Gas Emission Test : IEC 60754			
	Smoke Density Test: IEC 61034			
	ROHS Compliant:			
	Should be Compliant as per RoHS Directive 2011/65/EU			
	OEM Eligibility:			
	OEM should have manufacturing unit in India for at-least 5 years or			
	more. Should have Indian Technical Support Centre, Warehouse and			
	RMA center in India.			
	All passive products from single OEM & should be manufactured as			
1	per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel			
1	performance.			
	OEM should be a member of TIA organization.			
15	SITC of RJ45 Connectors.	500	Nos	
	Type:			
	Filed Installation MPTL Shielded RJ45 Connector Plug with IP20			
	Rating or Better			
	Function:			
	Fast Installation RJ45 Plug have been designed for mechanical and			
I	electrical reliability, using quality materials, to deliver a quick male		I	

			1	_
	connector solution that minimizes the time required by the installer to			
	complete each termination.			
	Features:			
	RJ45 Contact life >= 750 times			
	Mechanical Characteristics:			
	РоЕ			
	Support IEEE 802.3bt Type 4			
	UL Listed:			
	cUL Listed			
	Performance:			
	Cat6 or Better with Min. 250Mhz and 1Gbps Support			
	Termination:			
	Termination of cable on Plug through Universal Termination Tool to			
	minimize any manual termination like punch down. All the four pairs			
	should get crimped and cut together with the help of the tool.			
	IP Rating:			
	IP20 or Better			
	Wire:			
	24 – 23 AWG			
	Operating Temperature range:			
	-10 °C to +60 °C			
	RoHS Compliant:			
	Compliant as per RoHS Directive 2011/65/EU			
	OEM Eligibility:			
	OEM should have manufacturing unit in India for at-least 5 years or			
	more. Should have Indian Technical Support Centre, Warehouse and			
	RMA center in India.			
	All passive products from single OEM & should be manufactured as			
	per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel			
	performance.			
	OEM should be a member of TIA organization.			
16	Supply and Laying of 25mm Conduit Medium Class	2000	Mtrs	
10	Supply and Laying of 25mm Conduit Medium Class	2000	IVIU S	
	Supply and laying of medium class, 25 mm PVC Conduit along with			
1.5	joint and bend etc as per site requirement	5100		
17	Supply and Laying of 33/40mm HDPE Pipes	6400	Mtrs	
	Supply and laying of 33/40 mm HDPE Pipe for outdoor fiber cabling			
	along with joint and bend etc as per site requirement			
18	SITC of Outdoor OFC Joint Enclosure	65	Nos.	
	Supply, Installation, Testing and Commissioning of OFC Joint			
	enclosure for outdoor fiber cable along with all accessories as per site			
	requirement			
1.6	•	2.2		
19	SITC of 6 Meters Pole for Cameras.	80	Nos	
	Supply and Installation of 6 Meter GI pole for outdoor camera mount			
	as per site requirement			
				+
20	SITC of 24 port 25G/10G SFP+ Switch.	2	Nos	
	Switch shall be 1U to 3U and rack mountable in standard 19" rack.			
	Switch shall have 16 GB RAM and 16 GB Flash			
	Switch should support optional SSD to host 3rd party container based			
	application.			
	Switch shall have hot swappable 1:1 redundant internal power supply			
	and redundant fan.			
	Switch must have dedicated port, in addition to asked uplink ports.			
	Should support for minimum 400 Gbps of stacking thoughput.			
	Switch must have non-blocking switch fabric and forwarding rate			
	Switch must have non-blocking switch fabric and forwarding rate Switching system shall have minimum 32K MAC Addresses and 4000			
	pwiching system shan have illillillilli 32K MAC Addresses and 4000			

			T	
	VLAN IDs Switch should support minimum 4K ACLs, 8K Multicast and 30K IPv4, 15K IPv6 Routes Switch shall support application visibility and traffic monitoring with minimum 60 K sflow/jflow/netFlow entries. Packet buffer: 16 MB The offer product series should be IPv6 logo certified from day one Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.1ae (256-bit and 128-bit AES), 802.3x, 802.1p, 802.1Q, 1588v2 Should support AES-256 support with MACSEC-256 encryption algorithm on hardware Support BGP, MPLS, IS-IS, VRF, VXLAN, NAT, OSPF Routed Access, Policy-Based Routing (PBR), PIM SM, and Virtual Router Redundancy Protocol (VRRP) Shall have 802.1p class of service, marking, classification, policing and shaping. Should support strict priority queuing. Switch should support management features like SSHv2, SNMPv2c, SNMPv3, IGMP, Netconf/YANG. Switch should support port security, DHCP snooping, Spanning tree root guard, First Hop Security. IPv6 support in hardware, providing wire rate forwarding for IPv6 network Should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment. Eight egress queues per port for different types. During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic. Interface: 24 x 1/10/25G SFP28 Interfaces Certification: Switch shall conform to UL 60950, IEC 60950, CSA 60950, EN 60950 Standards: Switch / Switch's Operating System should be tested for EAL 2/NDPP			
21	STEC of 10C SED Turningsing.	26	NI. a	
21	SITC of 10G SFP Transceiver. Speed 10Gbps Single Mode/Multimode SFP should be compatible with the offered equipments	36	Nos	
22	SITC of 1G Copper SFP Monitoring System	4	Nos	
	Speed 1Gbps Shall be compatible with copper cable SFP should be compatible with the offered equipments			
23	SITC of OFC Patch Cord Duplex (3 Mtr)	36		
	Same Specification as mentioned in Sr.No.7			
24	SITC of Network Video Recorder Primary (128 Channel Network Video Storage Manager Server). Market position: The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset:		Nos.	
	•			

Intel® C620 series chipset

Form Factor:

Max. 1U rack mounted with OEM sliding rails

Configured CPU:

Dual 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency

Memory slots:

Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s.

Memory configured:

Min 32 GB DDR4, Dual Rank

Disks supported:

Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay

Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay

RAID Controller:

12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60

Disks configured:

Min 2x 480GB SSD in RAID1 for OS and Applications.

Network Ports:

2x 10G SFP+ Ports

2x 32G FC ports HBA

I/O slots

Up to 2 PCIe Slots

Ports:

Front Ports

1 x Dedicated Management micro-USB

1 x USB 2.0

1 x VGA

Rear Ports:

1 x USB 2.0

1 x USB 3.0

1 x Dedicated Management Ethernet port

1 x VGA

OS & Hypervisor supportCanonical Ubuntu Server LTS:

Windows Server with Hyper-V

Red Hat Enterprise Linux

SUSE Linux Enterprise Server

VMware ESXi

Power Supply

Dual, hot swap, redundant PSUs

Management integration

Support for integration with Microsoft System Center, VMware vCenter and vRealize Operations Manager, BMC Software, ServiceNow, Red Hat Ansible Modules, and Terraform Providers

Power & temperature

Real-time power meter, graphing, thresholds, alerts & capping with historical power counters.

Temperature monitoring & graphing:

Pre-failure alert

Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD

Configuration & management:

Real-time out-of-band hardware performance monitoring & alerting

Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health

Out-of-band hardware & firmware inventory

Zero-touch auto configuration to auto deploy a baseline server configuration profile

Management (continued)

Automated hardware configuration and Operating System deployment

				1
	to multiple servers			
	Zero-touch repository manager and self-updating firmware system			
	Virtual IO management / stateless computing			
	LCD panel			
	LCD / Security bezel. Should display system ID, status information			
	and system error code followed by descriptive text. LCD background			
	should light up in different colors during normal system operation &			
	error conditions.			
	HTML5 support			
	HTML5 support for virtual console & virtual media without using			
	Java or ActiveX plugins			
	Server security			
	Should have a cyber resilient architecture for a hardened server design			
	for protection, detection & recovery from cyber attacks			
	Server security			
	Should provide effective protection, reliable detection & rapid			
	recovery using:			
	Cryptographically signed firmware			
	Data at Rest Encryption (SEDs with local or external key			
	management) Secure Boot			
	Secure Erase			
	Secured Component Verification (Hardware integrity check)			
	Silicon Root of Trust			
	System Lockdown			
	TPM 2.0 FIPS, CC-TCG certified			
	Server security			
	(continued)			
	Configuration upgrades should be only with cryptographically signed			
	firmware and software. Should protect against firmware which			
	executes before the OS boots			
	Server security			
	(continued)			
	Should provide system lockdown feature to prevent change (or "drift")			
	in system firmware image(s) & prevent malicious modification of			
	server firmware			
	Intrusion alert			
	Intrusion alert in case chassis cover being opened			
	OS			
	Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or			
	latest			
	Performance Benchmark			
	SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates			
	benchmarks as per "spec.org" to be submitted.			
	Certifications			
	Server should have BIS, IEC60950 (UL) certification.			
	Server should have EPEAT registered in India.			
	Server OEM should have ISO9001, ISO27001 and ISO45001.			
	Warranty			
	5 years On-site comprehensive Next Business Day warranty with			
	24x7x365 remote hardware support. The warranty should reflect in the			
	support web site of the OEM.			
25	CUTCO of N.A	1	Maa	
25	SITC of Network Video Recorder Secondary (Failover)	1	Nos.	
	(128 Channel Network Video Storage Manager Server).			
	Market position			
	Market position:			
	The OEM for the proposed server must be in one of the top three			
	server vendors (by market share revenue in IDC) in any of the			
	previous 2 quarters			
	Chipset: Intel® C620 series chipset			
	miner © 0020 series empset			

Form Factor:

Max. 1U rack mounted with OEM sliding rails

Configured CPU:

Dual 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency

Memory slots:

Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s.

Memory configured:

Min 32 GB DDR4, Dual Rank

Disks supported:

Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay

Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay

RAID Controller:

12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60

Disks configured:

Min 2x 480GB SSD in RAID1 for OS and Applications.

Network Ports:

2x 10G SFP+ Ports

2x 32G FC ports HBA

I/O slots

Up to 2 PCIe Slots

Ports:

Front Ports

1 x Dedicated Management micro-USB

1 x USB 2.0

1 x VGA

Rear Ports:

1 x USB 2.0

1 x USB 3.0

1 x Dedicated Management Ethernet port

1 x VGA

OS & Hypervisor supportCanonical Ubuntu Server LTS:

Windows Server with Hyper-V

Red Hat Enterprise Linux

SUSE Linux Enterprise Server

VMware ESXi

Power Supply

Dual, hot swap, redundant PSUs

Management integration

Support for integration with Microsoft System Center, VMware vCenter and vRealize Operations Manager, BMC Software, ServiceNow, Red Hat Ansible Modules, and Terraform Providers

Power & temperature

Real-time power meter, graphing, thresholds, alerts & capping with historical power counters.

Temperature monitoring & graphing:

Pre-failure alert

Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD

Configuration & management:

Real-time out-of-band hardware performance monitoring & alerting

Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health

Out-of-band hardware & firmware inventory

Zero-touch auto configuration to auto deploy a baseline server configuration profile

Management (continued)

Automated hardware configuration and Operating System deployment

to multiple servers Zero-tooch repository manager and self-updating firmware system Virtual IO management / stateless computing LCD panel LCD y Security bezel. Should display system ID, status information and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error comditions. HTMI.5 support HTMI.5 support for virtual console & virtual media without using lava or ActiveX plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid econocyry using: Cryptographically signed firmware. Data at Rest Farryption (SFIDs with local or external key management) Secure Boot Secure Goot of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (confinued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware latrusion allert in case chassis cover heim opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "Spec org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server Should have BIS, IEC60950 (UL) certification. Server Should have BIS, Server Development of the Server Color should have BIS, Server OEM should have BIS, Server Should have BIS, Server Server Should					
Zero-touch repository manager and self-updating firmware system Virtual D management 'stateless computing LCD Jaccurity bezel. Should display system ID. status information and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error conditions. HTMLS support for virtual console & virtual media without using Java or ActiveX phugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Brase Secured Component Verification (Hardware integrity cheek) Silicon Root of Trust System Lockdown IPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift")) in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Parformance Benchmark SPEC/ OSG Integer Speed, PF Speed, Integer Rates and FP Rates benchmarks as per 'spec org' to be submitted. Certifications Server should have PFAT registered in India. Server OEM should have ISC0001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the surpport web site of the OEM.		to multiple servers			
Virtual IO management / stateless computing LCD puncl LCD / Security bezel. Should display system ID, status information and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error conditions. HTML5 support HTML5 support HTML5 support HTML5 support Server security Should have a cyber resilient architecture for a hardened server design for protection, detection of recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cyptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown ITML 2.0 FIPS, CCTCG certified Server security Continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security Continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spee.org" to be submitted. Certifications Server should have BIS, IECG0950 (UL) certification. Server should have BIS, IECG0950, ISO27001 and ISO45001. Warranty S years On-site comprehensive Next Business Day warranty with 24x7x305 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of ISOUTB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TR Uxable storage capacity to be offered to record all					
LCD yaseel LCD / Security bozel. Should display system ID, status information and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error conditions. HTMLS support for virtual console & virtual media without using Lava or ActiveX plugins. Sarver security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Brase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, IP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BEAT registered in India. Server OBM should bare ISO9001, ISO27001 and ISO45001. Warrany 5 years On-site comprehensive Next Business Day warranty with 24x7a505 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of ISO0TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
LCD / Security bezel. Should display system ID, status information and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error conditions. HTML5 support HTML5 support HTML5 support for virtual console & virtual media without using Java or ActiveX plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Fineryption (SEDs with local or external key management) Secure Boot Secure Erase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware latrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "Sec-or," to be submitted. Certifications Server should have BIS, IEC60950 (U.), certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site competensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of ISOTB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum ISOU TR Usable storage capacity to be offere					
and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error conditions. HTML5 support for virtual console & virtual media without using Java or ActiveX plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Socure Boot Secure Boot Secure Trass Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS hoots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spee, org" to be submitted. Certifications Server should have EPEAT registered in India. Server OEM should have ESO0001, 18027001 and 18045001. Warranty Sears On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.		*			
should light up in different colors during normal system operation & error conditions. HTML5 support HTML5 support for virtual console & virtual media without using lawa or Activex Plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Frase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Server security (continued) Solud provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware latrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISC00001, ISO27001 and ISO45001. Warrauty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.					
trror conditions. HTMLS support for virtual console & virtual media without using Java or ActiveX plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Boot Secure Boot Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IE-G6950 (UL) certification. Server Should have EPFAT registered in India. Server OEM should have EP9O01, ISO277001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.					
HTML5 support of virtual console & virtual media without using Java or ActiveX plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Boot Secure Boot Secure Hook of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have BIS, IEC60950 (UL) certification of Server should have BIS, IEC60950 (UL) certification. Server should have BIS, IEC60950 (UL) certification. Server should have BIS, IEC60950 (UC) certification. Server should					
HTML5 support for virtual console & virtual media without using Java or ActiveX plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Erase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift")) in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BTRAT registered in India. Server OEM should have BTRAT registered in India. Server Should have BTRAT registered in India. Server OEM should have BTRAT registered in India. Server OEM should have BTRAT registered in India. Server OEM should have BTRAT registered in India. Server Should have GTRAT registered in India. Server Should have GTRAT registered in India. Server Should have GTRAT registered in India. Server Should have BTRAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty Server S					
Java or Activek plugins Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid ecovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Erase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC / OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have EPFAT registered in India. Server OEM should have EJS0901, ISO27001 and ISO45001. Warranty Syears On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.		* *			
Server security Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Enae Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server frimware Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have FEAT registered in India. Server OEM should have ISO 9001, ISO 27001 and ISO 45001. Warranty 5 years Om-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage Cystem OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Gomponent Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TFM 2.0 FIPS, CC*TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BTS, IEC60950 (UL) certification. Server should have BTS, IEC60950 (UL) certification. Server should have BTSAT registered in India. Server OEM should have BTSO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
for protection, detection & recovery from cyber attacks Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Erase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty S years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days I Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		·			
Server security Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Erase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown IFM 2.0 FIPS. CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have BEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warrarty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Should provide effective protection, reliable detection & rapid recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PO: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
recovery using: Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert Intrusion alert Intrusion alert Robert Intrusion alert Intrusion alert Intrusion alert Intrusion Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Boot Secure Boot Secure Boot Silicon Root of Trust Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PO: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secure Brase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL.) certification. Server should have BIS, IEC60950 (UL.) certification. Server should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
management) Secure Boot Secure Grase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have FPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Secure Boot Secure Crase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		Y = Y			
Secure Erase Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Secured Component Verification (Hardware integrity check) Silicon Root of Trust System Lockdown TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Silicon Root of Trust System Lockdown IPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
System Lockdown IPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
TPM 2.0 FIPS, CC-TCG certified Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Server security (continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spee, org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
(continued) Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Configuration upgrades should be only with cryptographically signed firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have BFEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		· ·			
firmware and software. Should protect against firmware which executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
executes before the OS boots Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PO: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Server security (continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		1 0			
(continued) Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		· ·			
in system firmware image(s) & prevent malicious modification of server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
server firmware Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Intrusion alert Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Intrusion alert in case chassis cover being opened OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
OS Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
latest Performance Benchmark SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		Performance Benchmark			
benchmarks as per "spec.org" to be submitted. Certifications Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates			
Server should have BIS, IEC60950 (UL) certification. Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		Certifications			
Server should have EPEAT registered in India. Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		Server should have BIS, IEC60950 (UL) certification.			
Server OEM should have ISO9001, ISO27001 and ISO45001. Warranty 5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days 1 Set OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		Warranty			
24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM. 26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		5 years On-site comprehensive Next Business Day warranty with			
26 SITC of 1500TB SAN System for Video Storage for 90 days OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		support web site of the OEM.			
OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
OEM PQ: The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all	26		1	C	
The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all	20	STIC of 15001B SAN System for video Storage for 90 days	1	Set	
The Storage System OEM should be listed in the Top5 of IDC/Gartner latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all		OEM PO:			
latest Report. Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Storage Capacity: Minimum 1500 TB Usable storage capacity to be offered to record all					
Minimum 1500 TB Usable storage capacity to be offered to record all					
		CCTV cameras at 5MP resolution and 25FPS with H.265 video			

compression 24/7 for 90 days.

Storage Type:

Block Storage System with iSCSI / FC protocol

Controller:

Dual Active hot swappable Controllers

Cache:

32 GB memory spread across both controllers. SSDs will not be considered as Cache.

RAID:

Storage System to be configured with RAID6 protection and Global Hot Spares.

HDD:

Proposed Storage System should be configured using suitable 4TB/8TB/12TB/16TB/20TB/22TB 7200 RPM SATA/ SAS drives.

Scalability:

Proposed Solution should be scalable to meet capacity and performance requirement using multiple Storage Arrays of same type.

Host Connectivity per Controller: Storage should provide minimum 4 ports 32Gbps FC per controller.

Backend Connectivity:

12Gbps SAS

Total Aggregate Storage Bandwidth:

Proposed Storage Solution should ensure a minimum total aggregate bandwidth as defined by VMS and camera OEM on a 90% Write & 10% Read Video Workload. Storage OEM must provide Storage sizing and throughput calculation generated from their online sizing tool.

Storage Software Licenses:

All relevant storage software licenses should be provided for entire supported storage capacity of the proposed Array.

Storage Management:

Web based management-

- 1. HTML5
- 2. Single-array intuitive element manager
- 3. Common management tasks from convenient locations
- 4. Manage storage profiles, network connections, alerts etc.

Power Supply

Dual Redundant Power Supply

Validated Solution:

Offered storage series should be lab validated with at least three VMS OEMs including the offered VMS software. The storage OEM has to submit detailed lab validation report which should have been published at least 6 months before the bid submission.

Warranty:

5 years On-site comprehensive Next Business Day warranty with 24x7x365 remote hardware support. The warranty should reflect in the support web site of the OEM.

SAN Switch 24/48 Port:

Switch Architecture:

The proposed SAN Switches should have 1U form factor with upto 48 Nos. of 32Gbps Ports

Fiber Channel Ports:

SAN Switch should be configured with min 24 x 32Gbps FC Ports on day one

Autosensing capabilities:

4/8/16/32-Gb/s autosensing with 32Gb/s of dedicated bandwidth per port

Virtual SANs:

Up to 80 VSANs per fabric

Switch Core

Non-blocking

	Classes of Service			
	Class 2, 3 and F			
	Fiber Channel Port Type			
	Standard: E, F and B			
	Enhanced: SD, ST and TE			
	Network Security:			
	 Fiber Channel Security Protocol (FC-SP) switch-to-switch authentication 			
	• FC-SP host-to-switch authentication			
	• Role-based access control (RBAC) using RADIUS, TACACS+, or			
	LDAP authentication, authorization, and accounting (AAA) functions			
	• Secure FTP (SFTP)			
	• Secure Shell Protocol Version 2 (SSHv2)			
	• Simple Network Management Protocol Version 3 (SNMPv3)			
	implementing Advanced Encryption Standard (AES)			
	Secure Boot and Anti-counterfeit technology			
	Management and Management Access:			
	Data Center Network Manager (DCNM)			
	Management access through two out-of-band 10/100/1000 Mb/s			
	Ethernet ports			
	Power Supply:			
	Should have hot swappable redundant Power Supplies and fans			
	Cables:			
	5M LC-LC Multimode Optical FC cables should be provided			
	Warranty:			
	5 years On-site comprehensive Next Business Day warranty with			
	24x7x365 remote hardware support. The warranty should reflect in the			
	support web site of the OEM.			
27	SITC of Video Management System Server.	1	Nos.	
27		1	Nos.	
27	Market position	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor	-	Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s.		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured Min 2x 480GB SSD in RAID1 for OS and Applications.		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured Min 2x 480GB SSD in RAID1 for OS and Applications. Network Ports 2x 10G SFP+ Ports		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured Min 2x 480GB SSD in RAID1 for OS and Applications. Network Ports 2x 10G SFP+ Ports 2x 32G FC ports HBA		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured Min 2x 480GB SSD in RAID1 for OS and Applications. Network Ports 2x 10G SFP+ Ports 2x 32G FC ports HBA I/O slots		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured Min 2x 480GB SSD in RAID1 for OS and Applications. Network Ports 2x 10G SFP+ Ports 2x 32G FC ports HBA		Nos.	
27	Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters Chipset Intel® C620 series chipset Form Factor Max. 1U rack mounted with OEM sliding rails Configured CPU 3rd Generation Intel Xeon Scalable processors each with min 12 cores 2.1GHz base frequency Memory slots Should have min 16 DDR4 DIMM slots. Should support upto 1TB with speeds 3200 MT/s. Memory configured Min 16 GB DDR4, Dual Rank Disks supported Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) in front bay Or upto 4 x 3.5-inch SAS/SATA (HDD/SSD) in front bay RAID Controller 12Gbps 8Gb cache PCIe 4.0 with RAID 0,1,5,6,10,50,60 Disks configured Min 2x 480GB SSD in RAID1 for OS and Applications. Network Ports 2x 10G SFP+ Ports 2x 32G FC ports HBA I/O slots Up to 2 PCIe Slots		Nos.	

- 1 x Dedicated Management micro-USB
- 1 x USB 2.0
- 1 x VGA

Rear Ports

- 1 x USB 2.0
- 1 x USB 3.0
- 1 x Dedicated Management Ethernet port
- 1 x VGA

OS & Hypervisor support

- Canonical Ubuntu Server LTS
- Windows Server with Hyper-V
- Red Hat Enterprise Linux
- SUSE Linux Enterprise Server
- VMware ESXi

Power Supply

Dual, hot swap, redundant PSUs

Management integration

Support for integration with Microsoft System Center, VMware vCenter and vRealize Operations Manager, BMC Software, ServiceNow, Red Hat Ansible Modules, and Terraform Providers Power & temperature

Real-time power meter, graphing, thresholds, alerts & capping with historical power counters.

Temperature monitoring & graphing

Pre-failure alert

Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD

Configuration & management

- Real-time out-of-band hardware performance monitoring & alerting
- Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health
- Out-of-band hardware & firmware inventory
- Zero-touch auto configuration to auto deploy a baseline server configuration profile

Management (continued)

- Automated hardware configuration and Operating System deployment to multiple servers
- Zero-touch repository manager and self-updating firmware system
- Virtual IO management / stateless computing

LCD panel

LCD / Security bezel. Should display system ID, status information and system error code followed by descriptive text. LCD background should light up in different colors during normal system operation & error conditions.

HTML5 support

HTML5 support for virtual console & virtual media without using Java or ActiveX plugins

Server security

Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks

Server security

Should provide effective protection, reliable detection & rapid recovery using:

- Cryptographically signed firmware
- Data at Rest Encryption (SEDs with local or external key management)
- Secure Boot
- Secure Erase
- Secured Component Verification (Hardware integrity check)
- Silicon Root of Trust

		-	-	
	System Lockdown			
	• TPM 2.0 FIPS, CC-TCG certified			
	Server security			
	(continued)			
	Configuration upgrades should be only with cryptographically signed			
	firmware and software. Should protect against firmware which			
	executes before the OS boots			
	Server security			
	(continued)			
	Should provide system lockdown feature to prevent change (or "drift")			
	in system firmware image(s) & prevent malicious modification of			
	server firmware			
	Intrusion alert			
	Intrusion alert in case chassis cover being opened			
	OS			
	Microsoft Windows Server 2022 OS / Red Hat Enterprise Linux 9.0 or			
	latest			
	Performance Benchmark			
	SPEC/ OSG Integer Speed, FP Speed, Integer Rates and FP Rates			
1	benchmarks as per "spec.org" to be submitted.	1		
1	Certifications	1		
1	Server should have BIS, IEC60950 (UL) certification.	1		
1	Server should have EPEAT registered in India.	1		
1	Server OEM should have ISO9001, ISO27001 and ISO45001.	1		
	Warranty			
	5 years On-site comprehensive Next Business Day warranty with			
	24x7x365 remote hardware support. The warranty should reflect in the			
	support web site of the OEM.			
	1"			
0.0	CUTCO - CATALO CUI A ANT I A AI	0	Nos.	
28	SITC of VMS Client Workstation.	8	1105.	
28	SITC of VMS Chent Workstation.	8	NOS.	
28	Processor	8	NOS.	
28		8	NOS.	
28	Processor	8	1105.	
28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better	8	1105.	
28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM	8	1105.	
28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4	8	1105.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports	8	1405.	
128	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3	8	1408.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2	8	1408.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port	8	1408.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU	8	1408.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro	8	IVOS.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro Monitor	8	1405.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro Monitor Dual monitors should be supported	8	IVOS.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro Monitor Dual monitors should be supported Keyboard & Mouse	8	IVOS.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro Monitor Dual monitors should be supported Keyboard & Mouse Wired Keyboard & Mouse	8	IVOS.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card Ix Nvidia T1000 8GB Graphics Network IG Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro Monitor Dual monitors should be supported Keyboard & Mouse Wired Keyboard & Mouse Form Factor	8	IVOS.	
[28	Processor Intel Core i5 13th Gen, 4 Core, base 2.5GHz or better RAM 32 GB DDR4 HDD 500 GB SSD Chipset Intel W680 Graphic Card 1x Nvidia T1000 8GB Graphics Network 1G Ethernet Expansion Slots 1 half height PCIe x16 Gen4; 1 half height PCIe x4 Gen 3 I/O Ports 1 – USB 3.2 Gen 2 Type C 4 – USB 3.2 Gen 1/2 1 – Universal Audio Port 1 – Audio Line OUT / IN PSU 92% efficient (80 Plus Platinum) PSU OS Windows 11 Pro Monitor Dual monitors should be supported Keyboard & Mouse Wired Keyboard & Mouse	8	IVOS.	

	Trusted Platform Module (TPM 2.0), Chassis Intrusion switch,			
	Setup/BIOS Password			
	Certification			
	BIS, Energy Star			
	Warranty			
	5 years On-site comprehensive Next Business Day warranty with			
	24x7x365 remote hardware support. The warranty should reflect in the			
	support web site of the OEM.			
29	SITC of 32" full HD LED Screen for Workstation	8	Nos.	
	Diagonal Size			
	32			
	Panel Type			
	Edge LED BLU			
	Resolution			
	FHD (1920 x 1080)			
	Brightness			
	400nit			
	Panel Technology			
	VA			
	Contrast Ratio			
	4000:01:00			
	Viewing Angle(H/V)			
	178:178			
	Response Time			
	8ms			
	Display Colors			
	1.07 Billion			
	Color Gamut			
	72%			
	Dynamic C/R			
	MEGA			
	Audio			
	Built in Speaker (10W + 10W)			
	INPUT Type			
	HDMI 2.0 X 2,			
	USB 2.0 x 1 , Audio Input X 1			
	OUTPUT Type			
	Stereo Mini Jack, HDMI X 1			
	Duty Cycle			
	24 x 7			
	Special features			
	Anti Glare/ Haze 2%, Temperature Sensor, Pivot Display, IP5x			
	Rating, Wireless Mirrioring, 8GB internal memory			
	Logo			
	Should have Customized Logo when no signal is active			
	File support			
	Direct viewing of PPT, Word, PDF, Images and video from pen drive			
	Remote Controlling of device			
	Laptop / Desktop Should be controlled remotely by external Keyboard			
	and mouse through display			
	EXTERNAL CONTROL			
	RS232C(in) thru stereo jack, RJ45			
	Power Consumption			
	50			
	Standby Mode Power			
	less than 0.5W			
	VESA Mount			
	200*200mm			
	Operating Temperature			
L	I .			

		T		T
	0°C~ 40°C			
	Humidity			
	10~80%			
	Certificates			
	CE, FCC, UL, BIS			
	CL, I CC, UL, BIS			
30	SITC of 55" Video Wall (2x2 Matrix) with controller	1	Sets	
30	STIC of 35 Video Wall (2x2 Matrix) with controller	1	SCIS	
	Display wall			
	It shall be made up of multiple LCD modules stacked up in 2® rows			
	and 2(C) columns to achieve a video wall			
	OEM			
	The LCD video wall as well as the Controller should be from the same			
	OEM			
	Panel			
	55 inch Xtra Narrow Bezel			
	Bezel			
	1.8mm or lower			
	Back Light type			
	LED			
	Resolution			
	Full HD 1920 x 1080, professional-grade display			
	Display Colors			
	1.07 billion			
	Display Mode			
	Direct LED Backlight			
	Brightness (Typ.)			
	500 nits			
	Contrast Ratio (Typ.)			
	2000:1			
	Inputs			
	1x Analog RGB (D-Sub) 1x Digital DVI-D 2x HDMI 1x USB 3x			
	BNC- Component (YPbPr) 1x BNC-Composite (shared with			
	component) 1x DP 1x OPS Slot 1x Audio-In (RCA L/R) 1x Stereo			
	mini jack			
	Output			
	1x DVI / DP 1x Audio-Out 1x Speaker Out			
	Control			
	1x RS 232 In 1x RS 232 Out 1x RJ45			
	Power Control			
	AC Power ON/OFF Switch			
	Internal Speaker			
	10W x 10W			
	AC Power Input Range			
	100~240VAC, 50/60Hz			
	Power Consumption			
	Normal Mode: <150W Standby Mode: <0.5W			
	Dimensions (W x H x D)			
	1211.4 x 682.2 x 98.5 mm(@Vesa Mount)/ 106.9mm (@ Handle)			
	Operating Temperature			
	5°C ~ 40°C			
	Storage Temperature			
	-20°C ~ 60°C Operating / Storage Humidity			
	Operating / Storage Humidity			
	10% ~ 90%, non-condensing			
	Operating Life			
	>50,000 hours			
	The Controller should be able to make the 4 cubes behave as one			
	logical area. It should be possible to display any or all the inputs on			
	the video wall in any desired configuration.			
<u> </u>	ı			I

OEM

The LCD video wall as well as the Controller should be from the same OEM

Architecture

Should be based on PC architecture

Operating System

Windows 7 or higher -64 bit

RAM

4 GB or higher

Client

4 client licenses to be provided to control from client workstations

HDD

500 GB or higher

Power Supply

Single/Dual Redundant Power Supply

Outputs

15 DP/DVI outputs to the cubes

Inputs

4 HD inputs

Wall Management Software

Software to be provided to manage the layout on the display

Layout Management

All the Layouts can be scheduled as per user convenience. Software should support auto launch of Layouts according to specified time event by user. It should be possible to create offline layouts

Log File

Software should support user log file management

Live View

The software GUI should be able to show the live view of all the sources on the browser

Region Management

System software should able to manage Videowall region into multiple regions as per user requirements.

Caruosel

User should be able to see multiple signal source in one window with specified time interval and with user defined sequence.

Ipad/Android control

User should be able to control complete system through IPAD and Android system over Wi-Fi

Scenarios

Software should able to Save and Load desktop layouts from Local or remote machines

Layout Scheduler

All the Layouts can be scheduled as per user convenience

Software should support auto launch of Layouts according to specified time or event by user

Layout Preview

Software should support layout preview option

Launch Application

Software should be able to support

Integration with 3rd party devices

System should offer interface to enable control from 3rd party devices like Creston, AMX etc.

Live Preview

Software should able to provide live preview of videowall

Work space allocation

System should provide functionality to the administrator to define and allocate work space for a particular broadcaster or a group of broadcasters when working on a Video wall

Authentication

	Software should offer 4 levels of Authentication (User accounts, Permissions for functionality & Roles etc).			
	Offline Layouts It should be possible to create offline layouts			
	User friendly			
	Software should be user friendly Ticker			
	Ticker message can be positioned anywhere on the display wall. Inside			
	the ticker window, font size, colour and background can be set Ticker Type			
	Software should able to prepare various kinds of tickers: text ticker, RSS ticker, transparent and time ticker			
	SNTP			
	System should support SNTP function Protection			
	System should have Hardware License key to protect the software from unauthorized access.			
	Source Carousel:			
	User can set multiple sources that can change sequence after some time interval without changing the layout.			
	Region management Admin can assign Videowall workspace to user based on pixel map Snap sensitivity			
	Enables the magnetic behaviour to fit the sources automatically for easy alignment on the wall			
	Scalable GUI Scalable GUI to scale to any size of Videowall screen.			
	Scheduler			
	User can schedule the layout on specific date & time, weekday, weekend, start & end date			
	Source positioning			
	User can position the source input on Videowall with single click IPAD Management			
	App for control should be available on App Store Transparency			
	Controller should support transparent image and SVG content			
	Perspective sharing Should support sharing of perspectives with operator workstation and			
	video wall.			
1	SITC of 86" Interactive Panel Screen	2	Nos.	
	Sign in directly from QR Code on Interactive Whiteboard Software			
	and link Cloud Storages (Google Drive, Microsoft One Drive, Box or			
	Drop Box) Download results as Excel sheets Auto Grading of answers Create Online Quiz with Time Limit from Whiteboard Software Text			
	to Speech inbuilt in Whiteboard Software (Male or Female Voice)			
	Handwriting Recognition Drag and Drop YouTube videos, Direct			
	images from google search Wireless Casting on IFP from Mobile &			
	Laptop Artificial Intelligence Pen Screen Recording Live webcast directly from Interactive Whiteboard Software to YouTube and			
	Facebook, Same Whiteboard Software for Windows, Android &			
	Browser Entity Management & Device Manager to Manage IFP			
	remotely without LAN, also to share Content & Broadcast Messages			
	Remotely onto IFPs. Software FeaturesCertifications: BIS, TUV for Flicker Free & Low Blue Light, CB Power Consumption: 160W or			
	Less Light Sensor: Yes SPEAKERS: 16W x 2 Type C: x1 (PD65W +			
	DP1.2 + Data USB2.0 + 10M/100M sharing) Type B: x2, for touch			
	Type A: USB3.0 x4 (Front x2, Rear x2), USB2.0 x1 RJ45: x2 SPDIF:			
	x1 Audio Out: 3.5mm x1 OPS Slot: 1 RS232: x1 VGA : 1 Audio In: PC audio in (3.5 mm)*1 HDMI In: Minimum 3 Touch Point: 40 points			
	or Higher Type/ Tech: IR Recognition/ P-Cap Storage: 128 GB or			

	More RAM: 8GB DDR4 or More Processor: Quad Core ARM Cortex A55 x 4 or Higher Android 13.0 Orientation: Landscape Thickness: 4mm Surface Treatment: Hardness: 9H or Higher Backlight Life: Minimum 30,000 hrs of Higher Viewing Angles: H = 178, V = 178 typ. Response Time: 8ms or Better Contrast Ratio: 5000:1 (DCR) Brightness: Minimum 450 Nits or Higher Colours: 1.07 Billion Colors Native Resolution: 4K60hz Aspect Ratio: 16:9 Display Area (mm): Minimum 1913.04(H) x 1083.96 (V) Type/Tech: IPS TypePanel Size: 86" or Higher Interactive Flat Panel.		
32	SITC of Smart Cooling Rack (7kW) with 42U in height with 800X1200 for Network/ Server application.	1	
	The specification includes Integrated, Modular, Intelligent data center infrastructure of self-contained, standalone system which shall be design, engineering, manufacture, assembly & testing at manufacturer's factory and delivery at site with proper installation & commissioning with testing for the proposed data center infrastructure shall be in adherence to data center guidelines and best practices to ensure high availability of data operation. The Intelligent Data Center Infrastructure shall basically include Self-Contained 42U Rack, Rack Mount Air Conditioner, Rack Mount UPS in N+N configuration, Rack PDU in N+N configuration, Environment Monitoring System, Electrical Distribution Panel The Data Center infrastructure shall provide many functionality and some of the key functionalities are cold aisle containment on front side & hot aisle containment on rear side, thermal insulation in cold aisle, remote monitoring & management and single point of service. Intelligent Data Center Infrastructure having minimum 7 critical equipment out of Rack, UPS, Cooling, PDU, Electrical DB Panel and Monitoring system along with temperature & humidity sensor, IP Camera shall be from same OEM. Rack & Accessories— Rack Dimensions 2000 (Height) x 800 (Width) x 1200 (Depth) in mm. Rack mounting 19" mounting type. Rack U Space 42U with additional 8U space vertically on front side. Standards Rack Besign Rack Besign shall be sturdy frame section of welded construction of GI material. Rack Frame Rack Frame shall be sturdy frame section of welded construction of GI material. Rack Frame shall be provided with 100 mm height for cabling & air conditioning piping. Cutouts with rubber grommet on top and bottom plate for cable entry. Cable entry provision from top & bottom both through Neoprene grommet. Vertical cable manager Vertical cable manager (04 nos.) to be provided on front side.		
	Front Door		

Front Glass door for complete 42U height visibility and rear plane split door.

Insulation

Thermally insulated cold aisle containment.

Blanking Panel

Complete blanking panels (2U & 1U) of sheet metal to prevent air mixing.

EM locks

Each door shall have 02 nos. of EM (Electromagnetic) lock and 01 no. gas spring to allow auto door opening through access control.

Rack Mount Air Conditioning System

Rack Mount Cooling

The system should include rack mount air conditioner of 7 kW - 01 no. in each rack to cater the IT load of up to 7 kW. One rack mount air-conditioned should not occupy more than 8U space.

Cooling Capacity

7 kW (2Tr)

Mounting & U Space

19" rack mount type and not more than 8 U space.

Duty Operation

24/7 with 100 % duty cycle.

Indoor & Outdoor unit

Cooling unit shall be of Split type indoor & outdoor unit design.

Compressor

Industrial grade Rotary compressor for high reliability.

Evaporator Fan

Radial flow evaporator fan for high energy efficiency.

Voltage Protection

Under voltage & over voltage safety protection.

HP & LP Protection

High Pressure & Low Pressure protection for safe operation.

Insulation

Thermal insulation on indoor unit.

Refrigerant

Environment friendly R410A refrigerant

Breaker

Individual breaker for indoor & outdoor unit.

Outdoor Unit

Suitable to work on high ambient 48degC to 52degC

Drain Tray

Long life tray material SS304

Connection for indoor

Flexible hose SS304 use for indoor connection

Master slave

Master Slave logic available for combined rack

Monitoring-

Monitoring Configuration

The environmental monitoring system of data center infrastructure shall include critical sensor like temperature & humidity, door open, smoke detection, water leak detection which shall enable the remote monitoring over IP and should be able to send email alerts.

Remote Monitoring

Intelligent Rack based environment remote monitoring.

Form Factor

1U, 19" rack mount type mounting.

Communication

RS 485 x 2 standard Modbus Communications. RJ45 x 1:- 10/100

Base-T, Single window for monitoring all sensors.

Notifications

Real time notification providing faster management response.

SNMP

SNMP allowing easy integration with any enterprise management

system.

GUI

Graphical interface and historical data records for more effective management.

Protocols

Protocols: IPv4/IPv6, FTP/SFTP/TFTP, DHCP, SMTP, HTTP/HTTPS, SNMP v1/v3, SNTP, syslog, Telnet/SSH, RADIUS.

Temperature & Humidity

Temperature & Humidity Sensor, with LCD display and RJ45 connector.

Digital Inputs

Digital inputs – 4nos. for external dry/wet contact sensing.

Analog Inputs

Analog inputs – 2 nos. Voltage 0-10Vdc & current – 4 to 20mA

Relay Outputs

Relay Output – 2 nos.

Environmental Sensors

Temperature & Humidity sensor, Door opening sensor, Water leak detection sensor, Smoke detection sensor. Alarm device with LED flash and sound option.

Server Health Monitoring

Server's health monitoring using IPMI protocol on a single centralized dashboard.

Beacon Alerts

Beacon should be blow for personalized critical alarms and warnings Electrical Power Distribution Unit

Configuration & U Space

19" rack mountable Power Distribution Unit with essential breakers & sockets to be mounted inside the casing and shall not be more than 2U space.

Main Incomer

63 Amp 4 Pole MCB with suitable provision of terminal blocks for connections.

Main Incomer Cable

Integrated PVC cable shall be provided with 63 Amp industrial plug & socket for safe & secure connection.

UPS Input

2 nos. of 40 Amp SP MCB for UPS Supply. Cooling Input

2 nos. of 32 Amp DP MCB for Cooling Unit Supply.

Connectors

All input supply cables from EPDU unit to equipment are connected with suitable connector (male - female) with suitable rating.

Spares MCB

Provision for 1 nos. UPS, 1 nos. of cooling unit inputs breakers shall be provided to cater the additional of rack & cooling in future.

AC Socket

Provision of AC socket, 5 Amp (on rear side of EPDU) to allow connection of LED or spare device.

Pre-tested

The Electrical Power Distribution Unit shall be, pre-assembled and tested in manufacturer's factory to ensure reliable operation while execution

Rack Power Distribution Unit (Socket Strip/PDU)

PDU Configuration

Each rack shall have two vertical PDU's having total 24 sockets in each PDU, IEC C13 x 14 nos. C-19 x 04 nos. & 5/15 Amp x 06 nos. Indian Sockets with 32 Amp "D" curve MCB with safety guard & power indicator

Inbuilt Industrial Plug & Socket

The PDU input cable shall be pre-fitted with industrial plug & socket

Т		l	<u> </u>
of IEC60309 32 Amp to ensure fast & reliable connection of UPS	S		
O/P power. Biometric Based Access Control System:			
Configuration			
The Integrated data center infrastructure shall have inbuilt biometri	c		
(finger print) based access control system to operate the secure acces			
of both front & rear door of rack.			
Biometric / Pin / Card:			
The biometric access control shall also have feature of pin & car-	d		
authorization as additional option of accessing the doors.			
Auto Door Opening:			
The front & rear door of rack shall open automatically through access control in case of emergency during rise in temperature (air			
conditioner or mains supply failure) beyond threshold pre-settable			
value.			
Reader cum Controller:			
The access control system shall of standalone type of reader cur	n		
controller.			
Communication:			
Wi-Fi, Ethernet, RS485, USB Host.			
Display:			
display of access control shall be of 2.4" LCD-TFT color.			
EM locks: The EM (Electromagnetic Lock) to be provided on each front & rea	r		
door (02 nos./door) and shall be connected to access control system			
Rodent Repellent:			
Rodent Repellent			
Supply & Installation of 1 no. of Ultrasonic Rodent Repeller of high	n		
frequency sound. The Standalone digital Rodent Repellent shall			
protect an enclosed area of 300 sq. ft. and have an built in transduce	r		
which emits ultrasound.			
Fire Suppression System			
Integrated fire detection & Suppression system as per NFPA guidelines.	1		
Novec 1230 gas based clean agent fire suppression system.			
Fire system to be mounted on side panel of same server rack with	h		
integrated enclosure and piping to be terminated from top of rack.			
There should be 02 nos. of smoke detectors in cross zone mounter	d		
inside the rack on top cover.			
There should be Abort & Release switch integrated with fire system	n		
for manual action. Standards			
Manufacturer - QMS:			
As per ISO 9001: 2015			
ISO 45001 :2018			
EMS: As per ISO 14001: 2015			
OSHAS: As per ISO 18001: 2007			
Quality Management System - TL 9000			
NABL Factory calibration lab of OEM in INDIA	1		
OEM should have at least 2 valid Certified Data Center Professiona (CDCP) on company payroll in each Solutions, Projects & Service			
departments			
Warranty: Warranty 5 Year			
SITC of 20 KVA Online UPS with Battery backup of 120 minutes	2	Nos.	
Date of Date o		[
Capacity			
20 KVA (1+1 Parallel			
Redundancy)			
AC Input Parameters AC Input Voltage			
320V-480V AC Three Phase			
520 + 100 + 11c Three Hase			

Frequency 50 Hz +/- 10% also work on DG Set AC OUTPUT PARAMETERS Output Voltage 220V I 230V AC Single Phase Technology IGBT-PWM with inbuilt isolation transformer Voltage Regulation +I- 1% Frequency 50 HZ +/- 0.01 O/o Waveform Sinewave Harmonic Distortion Less than 3% Efficiency >94% Power Factor 0.8 lagging Overload 110% for 10 Minutes 200% for 5 Cycles Output Distortion <3% Transient Recovery Within 3 Cycles Backup Time (Minutes) 120 minute or higher (100ah*30nos) on Each UPS PROTECTION Battery Over Voltage Yes Battery Under Voltage Yes Output AC Over Voltage Yes Output Overload / Short Circuit Yes INDICATIONS Mains ON Yes Load on Batteries Yes Battery Low Yes inverter Overload Yes Load on Mains Yes **Battery Boost** Yes DC VOLTAGE 360VDC METERING Digital Metering Available for Output Voltage/ Battery Voltage/ Output Current/ Output Frequency etc AMBIENT CONDITION Operating 0 Deg. C — 50 Deg. C Storage 0 Deg. C — 60 Deg. C Relative Humidity 95% RH

	Operating Altitude			
	upto 2000 Meter			
	Acoustic Noise			
	<60db at 1 Meter			
	Cooling			
	Forced air cooling by the internal fans			
	FEATURES			
	Hot Standby Mode			
	Yes			
	Cold start			
	Yes			
	Battery Parameter			
	Charging Current			
	minimum 10AMP			
	Battery Type			
	VRLA (Valve Regulated Lead Acid Battery), 12VDC			
	Battery Shutdown Voltage			
	10.7 V/pcs			
	Battery over voltage warning point			
	14.4V/pcs			
	Battery over voltage Warning			
	Comeback Voltage			
	13.7V/pcs			
	Battery low Voltage Warning point			
	11.4 V/pcs			
	Battery short protection			
	Protected by battery fuse			
	Battery Charging current			
	Charging Current should be suitable for Battery bank			
	Rack for battery			
	· · · · · · · · · · · · · · · · · · ·			
	MS battery Rack with minimum 3 inch height from			
	ground level.			
	Charges			
	In-built with UPS with Suitable rating			
	CERTIFICATION			
	ISO 9001 / 14001 / 18001 / RoHS / CE / EMC Safety/BIS			
	Parallel Redundancy			
	Load Sharing			
	Warranty			
	Five years UPS and Battery Both should be supplied.			
	Tite years of S and Battery Both Should be supplied.			
34	SITC of 1.5 Ton Split AC	5	Nos.	
34	SITC of 1.5 Ton Split AC	5	Nos.	
		5	Nos.	
	Type of AC	5	Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting,		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply.		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit Condensing unit tube coil material should be copper		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit Condensing unit tube coil material should be copper Outdoor Unit mounting stand		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit Condensing unit tube coil material should be copper Outdoor Unit mounting stand Design, Supply and fixing of suitable powder coated MS /GI stands		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit Condensing unit tube coil material should be copper Outdoor Unit mounting stand Design, Supply and fixing of suitable powder coated MS /GI stands for outdoor unit		Nos.	
	Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit Condensing unit tube coil material should be copper Outdoor Unit mounting stand Design, Supply and fixing of suitable powder coated MS /GI stands		Nos.	

	of installation			
35	SITC of 3.0 Ton Split AC 3 phase) Type of AC Split Air conditioner (inverter type) suitable for wall mounting, working on 230 volts, 50 Hz, Single Phase/Three Phase AC power supply. Mounting Wall mounting type Capacity 1.5 Ton / 3.0 Ton as per site requirement Indoor Unit Compact, light weight, sleek model with panels of durable Plastic material along with cordless remote Outdoor Unit Condensing unit tube coil material should be copper Outdoor Unit mounting stand Design, Supply and fixing of suitable powder coated MS /GI stands for outdoor unit Warranty		Nos.	
36	5 years warranty for the whole AC and compressor unit from the date of installation SITC of Video Processing Unit	2	Nos.	
	All-in-one Desktop for video processing and editing 23.5/24" 4.5K Retina Display Apple M3 processor chip with 8 core CPU (4 performance cores + 4 efficiency cores) 8 core GPU 16-core Neural Engine 512GB SSD Storage 16GB RAM 2x Thunderbolt/USB Ports Gigabit Ethernet Should be supplied with mouse and keyboard Should be preloaded with perpetually licensed Final Cut Pro software			
37	Supply and Laying of 48 Core SM Fiber Cable (400 MTR) Type 48 Core Armored Singlemode (9/125µm) Fiber optic Cable suitable for Outdoor application Cable 6 Core Singlemode fiber optic cables armored with colored fiber cores. Fiber cable is perfectly suited for both gigabit Ethernet and 10 gigabit Ethernet campus and backbone applications. Application The constructions are of ECCS Tape Armored Multi Tube design with HDPE outer Jacket making it suitable for Outdoor applications Outer Sheath HDPE Jacket / Black or Yellow Fiber Count 12/Tube or Better Cable Specifications Tube Color: Blue, Orange, Green, Brown Cable diameter: 13.5 ± 0.5 mm Crush Resistance 1000 N/100mm or Better Bend Radius 20 X D (mm)		Mtrs	

	Tensile Load (max)			
	2000 N			
	Optical Properties			
	Cladding Non-circularity : ≤ 0.7 %			
	Cladding Diameter: $125.0 \pm 0.7 \mu m$			
	Core/cladding Concentricity Error : ≤ 0.5 μm			
	Primary Coating Diameter : 250 ± 15μm			
	Attenuation Co-efficient			
	1310 Wavelength (nm) : \leq 0.39 dB/km			
	1550 Wavelength (nm) : $\leq 0.24 \text{ dB/km}$			
	Chromatic Dispersion:			
	1285 - 1330 Wavelength (nm) : ≤ 3.5 ps/nm.km (Min)			
	1550 Wavelength (nm) : ≤ 18 ps/nm.km (Min)			
	Temperature Range			
	Operating Temperature Range: -30°C to +70 °C			
	Compliance Standard			
	Complies to IEC 60793, IEC 60794 1			
	RoHS Compliant			
	Compliant as per RoHS Directive 2011/65/EU			
	OEM Eligibility			
	OEM should have manufacturing unit in India for at-least 5 years or			
	more. Should have Indian Technical Support Centre, Warehouse and			
	RMA center in India.			
	INVIA CERTEI III IIIUIA.			
	All and a second of form and open to the little and form and			
	All passive products from single OEM & should be manufactured as			
	per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel			
	performance.			
	OEM should be a member of TIA organization.			
38	SITC of 48 Port LIU (fully loaded)	4	Nos	
38		4	Nos	
38	Туре	4	Nos	
38	Type 48 Port Single Mode Full Loaded LIU	4	Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU		Nos	
38	Type 48 Port Single Mode Full Loaded LIU		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning.		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB Return Loss		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB Return Loss >= 55 dB		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB Return Loss >= 55 dB Operating Temperature		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB Return Loss >= 55 dB Operating Temperature -10 °C to + 60 °C		Nos	
38	Type 48 Port Single Mode Full Loaded LIU LIU Standard 19" Rack mountable with 48 Port LC Fiber Pigtails and accessories for installation and commissioning. Application Ethernet, Fiber Channel, ATM, LAN, MAN, WAN, Data communication, Data centers, premise installations and Indoor Application Fiber Count 48 Loaded with Pigtails LC - Simplex, Singlemode OS2, Min. 2 Mtr, 0.9mm Tight Buffer Material Steel Loaded with Couplers LC Duplex Couplers Accessories Loaded in Panel 12/24/48 Fiber Splice trays should loaded in LIU with Pigtails, Splice Tubes, Min. 2 x PG13.5 Gland, Cable Ties and Velcro Straps Optical Characteristics for Loaded Pigtail Insertion Loss <= 0.3 dB Return Loss >= 55 dB Operating Temperature -10 °C to + 60 °C RoHS Compliant		Nos	

39	OEM Eligibility OEM should have manufacturing unit in India for at-least 5 years or more. Should have Indian Technical Support Centre, Warehouse and RMA center in India. All passive products from single OEM & should be manufactured as per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel performance. OEM should be a member of TIA organization. SITC of Fiber Patch cord (Duplex) (3 Mtr) Same Specification as mentioned in Sr.No.7		Nos	
40	Supply and Laying of 33/40 mm HDPE Pipe Supply & Laying of Standard make 33/40 mm HDPE Pipe	600	Mtrs	
41	SITC of CAT6 Shielded Patch Cord (2 Mtr) Features Cat6 Shielded Patch Cord 26 AWG or Better with Stranded Bare Copper Conductors	20	Nos	
	No. of Pairs 4 Pairs Jacket LSZH Environmental Characteristics Operating Temperature -10 °C to +60 °C Length 2/3/5 Mtr. OEM Eligibility OEM should have manufacturing unit in India for at-least 5 years or more. Should have Indian Technical Support Centre, Warehouse and RMA center in India. All passive products from single OEM & should be manufactured as per latest TIA/EIA or ISO/ IEC standard and have 25 years of channel performance. OEM should be a member of TIA organization.			
42	SITC of Aluminium Partitioning with 12 mm thick particle board & 12 mm thick Glass Providing and fixing of Powder coated Aluminium work for doors and Partitions walls with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners for fixing of vertical sections in the ceiling to support the frame including necessary filling up of gaps at junctions, top, bottom and sides with required PVC/ neoprene felt, etc. Aluminium sections shall be smooth, rust free straight, metered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass/ stainless steel screws all complete with powder coated aluminium section of 63.5mm X38.10mm (sectional weight of the Aluminium section should not be less than 4 Kg. for the sectional length of 15') with 12 mm thick both side pre-laminated flat pressed three layer of graded wood particle board conforming to IS:12823 grade I type II in panelling of partition walls or with float glass panes of 12 mm thickness (Modi, saint Gobain or equivalent) panelling of required height complete in all respect including all		Nos	

				Ι
	hardware fittings Total Room Size : 2 Rooms of 20'x 25'			
	Total Four Partitions of: 1. 10' x 8' (Chairperson's Room/with 2 Aluminium half Glass Doors)			
	2. 10'x 17' (Meeting Room/with 1 Aluminium half Glass Door)			
	3. 10'x25' (Staff Room/with 1 Aluminium half Glass Door)4. 12'x20' (Data Central & Control Room/with 1 Aluminium half			
	Glass Door)			
43	SITC of Short wave length laser-Based Absolute Smoke Detection system with all accessories as required.	1	Nos	
	SITC of Short wave length laser-Based Absolute Smoke Detection system with 2 pipe inlets, 2000 sq m area coverage; Wide sensitivity range - 0.05%-6.56% obs/m; built in 2 alarm levels; High efficiency aspirator; Clean air barrier optics protection; Inbuilt dual stage filtration with memory and live Monitoring of filter; 2 Nos of inbuilt potential free relay outputs, Contacts rated 2 A @ 30 VDC (Resistive); supports Linear pipe length of 220 m and branched pipe up to 392 m per detector; supports minimum 40 Nos of sampling points in very early warning configuration (Class A design with transport time less than 60 seconds for earliest possible smoke detection & alarm), Auto Learn for automatic setup of alarm threshold, Referencing & Event log; 2100 (Built in memory without need of external memory storage card) and the smoke detection chamber shall be sealed maintenance free with duel detection technology (Laser light scattering combined with CMOS imaging for highly reliable smoke readings). The cost will also include UL & FM listed power supply unit from the same OEM manufacturer as the ASD detector with 230V AC to 24 VDC 2 amps with 24 hour battery backup in normal condition and 30 minutes in alarm condition etc complete as per requirement. ASD models with spot type detectors installed inside a closed box fitted with fan ((Point in BOX) shall not be treated equivalent. Approvals- UL, FM, ULC & CSFM (All required mandatory) 24V DC operated conventional alarm sounder with built in strobe for pre alarm & alarm annunciation inside the room being protected by ASD detector (tone for pre-alarm shall be different from alarm). 25 mm dia (OD) Fire retardant (FR) CPVC pipe with nozzle and hole in pipe etc complete as per specifications and requirements including pipe supporting structure from ceiling/truss/ above false ceiling etc. Capillary Sampling Points - Flush type with end Cap for large bore pipes, 25 mm etc complete as per requirements (needed only if false ceiling is present).			
	SITC of Complete System of Aspiration as per required accessories to complete the system			
44	SITC of Fire Suppression System with all Pipes, Nozzle, cable and other accessories.	1	Nos	
	The system shall UL/FM/ ULC certified technology that allows for a higher capacity to overcome frictional losses and allow for higher distances of the agent flow and also allow for better agent. Suppression system shall be provided in all the areas specified in National Building Code and all other applicable code including any local by-laws.			
	The suppression system shall provide for high-speed release of Gas based on the concept of total Flooding protection for enclosed areas. A Uniform extinguishing concentration shall be as applicable and approved by the manufacturer/NFPA 2001/UL/ULC/FM of the gases for 70 deg F, or higher as recommended by the system / agent			

manufacturer. The system discharge time shall be 10 seconds or less, in accordance with applicable NIPA standards. Sub floor and the ceiling would to be included in the protected volume. The system to be supplied by the bidder must satisfy the various and all requirements of the Authority having Jurisdiction over the location of the protected area and must be in accordance with the OFM's product design criteria. The discharge nozzles shall be located in the protected volume in compliance to the limitation with regard to the spacing, floor and ceiling covering etc. The nozzle locations shall be such that the uniform design concentration will be established in all parts of the protected volumes. The final number of the discharge nozzles shall be according to the OEM's patented and certified solvane, which shall also be approved by third party inspectors and certifiers such as UL. / FM/ULC. The Gas shall be stored in scamless storage containers complying with the SMPV Rules set on thy Chief Controller of Explosives, Nagpur, India. The Bidder shall be required to produce a NOC for the Chief Controller of Explosives, Nagpur for the storage containers against the cylinder identification numbers punched on them. The Gas shall be discharged through the operation of an Electric (solenoid) operated device or pneumatically operated device, which releases the agent through a differential pressure valve. The Gas discharge shall be activated by an output directly from the Gas. Release control panel, which will activate the solenoid valve. The Gas agent is stored in the container as a liquid. The manual release device fitted on the Gas Cylinder(s) shall be of a manual ever type and a faceplate with clear instruction of how to mechanically activate the system. In all cases, gas cylinders shall be fitted with a manual mechanical operating facility that requires two-action actuation to prevent accidental actuation. Briss Discharge nozles shall be used of dispersion patterns. The nozzles provided shall be UL listed/UL ap	The system discharge time shall be 10 seconds or less, in accordance with applicable NPPA standards. Sub floor and the ceiting wold to be included in the protected volume. The system to be supplied by the bidder must satisfy the various and all requirements of the Authority having Jurisdiction over the location of the protected area and must be in accordance with the OEM's product design criteria. The discharge nozzles shall be located in the protected volume in compliance to the limitation with regard to the spacing, floor and ceiting covering etc. The nozzle locations shall be such that the uniform design concentration will be established in all parts of the protected volumes. The final number of the discharge nozzles shall be secording to the OEM's patented and certified software, which shall also be approved by third party inspectors and certifiers such as UL / FMAULC. The Gas shall be stored in seamless storage containers complying with the SMPV Rules set out by Chief Controller of Explosives, Nagpur, India. The Bidder shall be required to produce a NOC for the Chief Controller of Explosives, Nagpur for the storage containers against the cylinder identification numbers punched on them. The Gas shall be discharged through the operation of an Electric solenoid y operated device or pneumatically operated device, which releases the agent through a differential pressure valve. The Gas discharge shall be activated by an output directly from the Gas gent is stored in the container as a liquid. The manual release device fitted on the Gas Cylinder(s) shall be of a manual lever type and a faceplate with clear instruction of how to mechanically activate the system. In all cases, gas cylinders shall be fitted with a manual mechanical operating facility that requires two-action actuation to prevent accidental acuses, gas cylinders shall be fitted with a manual mechanical operating facility that requires two-action actuation to prevent accidental acuses, on the conders shall be fitted with a manual fease shall be				
accessories i.e. Manual Control Panel with GPRS Enable, Fuel tank, Battery with leads. Reputed brand (62.5 KVA 3 Phase) Diesel Engine, Water Cooled, at	accessories i.e. Manual Control Panel with GPRS Enable, Fuel tank, Battery with leads. Reputed brand (62.5 KVA 3 Phase) Diesel Engine, Water Cooled, at 1500 RPM. The engine should be provided with electrical starting arrangement & should give the electrical output of 62.5 KVA. The		The system discharge time shall be 10 seconds or less, in accordance with applicable NFPA standards. Sub floor and the ceiling void to be included in the protected volume. The system to be supplied by the bidder must satisfy the various and all requirements of the Authority having Jurisdiction over the location of the protected area and must be in accordance with the OEM's product design criteria. The discharge nozzles shall be located in the protected volume in compliance to the limitation with regard to the spacing, floor and ceiling covering etc. The nozzle locations shall be such that the uniform design concentration will be established in all parts of the protected volumes. The final number of the discharge nozzles shall be according to the OEM's patented and certified software, which shall also be approved by third party inspectors and certifiers such as UL / FM/ULC. The Gas shall be stored in seamless storage containers complying with the SMPV Rules set out by Chief Controller of Explosives, Nagpur, India. The Bidder shall be required to produce a NOC for the Chief Controller of Explosives, Nagpur for the storage containers against the cylinder identification numbers punched on them. The Gas shall be discharged through the operation of an Electric (solenoid) operated device or pneumatically operated device, which releases the agent through a differential pressure valve. The Gas discharge shall be activated by an output directly from the Gas Release control panel, which will activate the solenoid valve. The Gas agent is stored in the container as a liquid. The manual release device fitted on the Gas Cylinder(s) shall be of a manual lever type and a faceplate with clear instruction of how to mechanically activate the system. In all cases, gas cylinders shall be fitted with a manual mechanical operating facility that requires two-action actuation to prevent accidental actuation. Brass Discharge nozzles shall be used to disperse the Clean gas agent. The nozzles shall be Brass with female threads and a		
THE STATE AND VICTOR DINAMED IN TRANSPORT WITH ABOUT MINISTER	arrangement & should give the electrical output of 62.5 KVA. The	45	accessories i.e. Manual Control Panel with GPRS Enable, Fuel tank, Battery with leads. Reputed brand (62.5 KVA 3 Phase) Diesel Engine, Water Cooled, at	Nos	

	alternator, Dry type air cleaner, Mico fuel pump, A1 class governing, Flywheel with flywheel housing, Residential silencer, First fill of lube oil, Engine protections: Low lube oil pressure & High Water temperature. The alternator should be of Standard make, Three-phase, 50 cycles, self regulated, self-excited, screen protected, 62.5 KVA alternator of rated capacity at 0.8 power factor. The alternator should conform to relevant BS/IS standard. The Control Panel should be a steel construction Control panel, dust & vermin proof comprising of MCB/MCCB, CTs for metering, Voltmeter, Ammeter, Frequency meter, Indications, Fuses etc. Windows for control panel should be with glass/acrylic and sealed with neoprene rubber gasket. The canopies should be soundproof using the best quality. Canopy should be four sided with 2.5 mm Thick CRCA sheet Base. The Doors & Roof should be fabricated from MS CRCA of adequate thickness with airtight EPDM foam gasket. MS/Zinc die cast hinges must be provided. The canopy should be equipped with a forced air circulation fan of reputed make. The canopy will have slope on the top surface so that rain water can drain easily. The insulation material should be PU Foam. The material should be fire retardant. Air inlet and outlet louvers, with special sound reduction dampers for proper air ventilation should be provided. The construction should be modular, bolted construction and should have access from all sides. All fasteners should be with washers. The fasteners should be SS/Zinc coated MS. I no. lamp with ON/OFF switch and socket inside the canopy should be provided. The Earthing arrangements for DG set / Canopy should be homogenous. All metal surfaces should be thoroughly treated with degreasing, derusting and phosphating. The finish must be suitable for outdoor use. The maximum noise level permitted during full load should be 75 dB (A), measured at 1 meter distance from the edge of canopy. The product must be certified by CPCB as per latest sound norms. The fuel tank should be rem			
46	SITC of 5MP Outdoor IR PTZ Camera Outdoor PTZ Dome Camera Supply, Installation, Testing & Commissioning of Outdoor 1/2.8 inch CMOS 5MP or better, IR PTZ Camera, Effective pixels 2592 x 1944, 5MP, 25 fps; 30x Optical Zoom & 16x Digital Zoom, tripple stream; IR distance: 150 meter; Lens type: Wide 5 to 6mm, Tele 150 to - 180mm Motorized Auto focus zoom lens; Memory card slot: Min 256GB support. Minimum Illumination- Sense up on- Color: 0.005 lux color, B/W: 0 lux IR On, WDR 120dB, Edge Video Analysis Video Motion Detection, Intrusion, Lioter, Counter & Tampering, 3DNR, BLC, HLC, White Balance, EIS, Defog, Mechanical switchable IR filter (Auto ICR), Pan Range 360° continuous, Tilt Range -10° to 90°, Pan/Tilt Modes - Pan: 0.1°/s - 180°/s; Tilt: 0.1°/s - 90°/s, Presets 256, Preset Accuracy 0.25 Deg, 16 Patrol & Tours, Alarm I/O - 2In/2Out,	10	Nos	

	2-Way Audio- 1/1 Channel In/Out, 256GB Memory card slot, 4 individually configurable privacy masks, 8 Region of Interest, POE+ (802.3 at) or 24VAC 3A for indoor/Outdoor application, IP66/67, IK 10; Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.		
47	Manpower (Skilled) for 60 months AI Engineer (B.E./B.Tech) with 2 years experience in relevant domain: 02 Network Engineer (B.E./B.Tech) with 2 years experience in relevant domain: 01 Network Operator (diploma or equivalent in technical domain) with 2 years experience in relevant domain: 04 Field operator (Graduate) with 2 years experience in relevant domain: 01	Nos.	

ESSENTIAL GENERAL INSTRUCTIONS FOR SPECIFICATION

- 1. All the bidders are required to quote the rate for all the items in the BOQ. The L1 will be determined by taking into consideration the rate quoted for all the items together.
- 2. The Institute may or may not procure all these items together. The Bidder shall not have any right in this regard.
- 3. It is the sole responsibility of the bidder to quote the rate for all the items as per BOQ. If it is found after opening of financial bid that any technically qualified bidder have not quoted a rate for all the items as per BOQ, their bid shall not be considered for financial evaluation. No correspondence shall be entertained in this regard.
- 4. Pre-installation site preparation requirements to be indicated and specified along with the bid.
- 5. Installation and training should be provided free of cost to the Institute fraternity.
- 6. The complete installation and commissioning must be carried out by the supplier at the destination in our premises. Machine package shall be opened by Bidder in presence of an IIT(BHU) representative.
- 7. Adherence to all specifications is compulsory.
- 8. Only the bid of the firms quoting the rate for "all the Items together mentioned in the price bid" will be taken into consideration for evaluation.
- 9. If necessary, Bidders might be asked to provide proof for Country of Origin or Country of Manufacturing.
- 10. Must have certified engineers in India. Contact details must be shared.
- 11. Must be able to update software remotely and must have digital advanced training as per requirement
- 12. Scanned Copy of Certificate/Undertaking indicating that the rates quoted for supply of said items by the firm are not higher than the rate of item supplied by the firm in any other Government Organization/Institutions/PSU etc.
- 13. The quoted model's technical specifications and brochure should be available on the website.
- 14. Catalogue must be enclosed containing details of equipment.
- 15. Services will be given free of cost during the warranty period.
- 16. The bidding company/firm are required to self-attest the scanned copies of documents, along with the bid, signed on each page with seal, to establish the bidder's eligibility and qualifications failing which their bid shall be summarily rejected and will not be considered. The original copies shall be produced by the bidder as and when required by the purchaser.
- 17. The technical bid must not include price bid, otherwise bid will be summarily rejected.
- 18. Equipment must be supplied with required accessories in running condition.
- 19. Please note that all the uploaded documents must be clearly marked with page no. and signature of authorized signatory. Further, the bidder must mention the page no. against each compliance in order to enable the Institute to verify the document quickly and properly.

TECHNICAL COMPLIANCE STATEMENT

(to be submitted on the letterhead of bidder)

TENDER FOR SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND MAINTENANCE OF CCTV CAMPUS SURVEILLANCE SYSTEM AT IIT (BHU) VARANASI

Sr. No	Name and Description	Quantity	Unit		anasification than
1	SITC of 5MP Bullet Camera with 50M IR Distance.	300	Nos	/ Better)	
2	SITC of Network Video Recorder Software License for Primary & Failover (N+1) for 320 Cameras.	1	Set		
3	SITC of Video Management Software for 320 Cameras along with Client License (8 No's).		Set		
4	SITC of 8 Port PoE Switch with 2 Port Fiber.	65	Nos		
5	SITC of 24 Port PoE Switch with 4 port Fiber	1	Nos		
6	SITC of 1G SFP Transceiver.	132	Nos		
7	SITC of OFC Patch Cord Duplex (3 Mtrs).	132	Nos		
8	SITC of 6 Port LIU (Fully Loaded).	65	Nos		
9	SITC of 9U Weatherproof Junction Box with 500mm Depth.	42	Nos		
10	SITC of 9U Wall Mount Network Rack with 500mm Depth.	28	Nos		
11	SITC of 1KVA UPS with inbuilt Batteries.	65	Nos		
12	Supply and Laying of 6 Core Armoured Optical Fibre Cable.	8000	Mtrs		
13	Supply and Laying of 3 Core 1.5 Sqmm Power Armoured Cable.	8000	Mtrs		
14	Supply and Laying of CAT6 F/UTP Cable	35	Box		
15	SITC of RJ45 Connectors.	500	Nos		
16	Supply and Laying of 25mm Conduit Medium Class	2000	Mtrs		
17	Supply and Laying of 33/40mm HDPE Pipes	6400	Mtrs		
18	SITC of Outdoor OFC Joint Enclosure	65	Nos.		
19	SITC of 6 Meters Pole for Cameras.	80	Nos		
20	SITC of 24 port 25G/10G SFP+ Switch.	2	Nos		
21	SITC of 10G SFP Transceiver.	36	Nos		
22	SITC of 1G Copper SFP Monitoring System	4	Nos		
23	SITC of OFC Patch Cord Duplex (3 Mtr)	36			
24	SITC of Network Video Recorder Primary (128 Channel Network Video Storage Manager Server).	3	Nos.		

25	SITC of Network Video Recorder Secondary (Failover) (128 Channel Network Video Storage Manager Server).	1	Nos.	
26	SITC of 1500TB SAN System for Video Storage for 90 days	1	Set	
27	SITC of Video Management System Server.	1	Nos.	
28	SITC of VMS Client Workstation.	8	Nos.	
29	SITC of 32" full HD LED Screen for Workstation	8	Nos.	
30	SITC of 55" Video Wall (2x2 Matrix) with controller	1	Sets	
31	SITC of 86" Interactive Panel Screen	2	Nos.	
32	SITC of Smart Cooling Rack (7kW) with 42U in height with 800X1200 for Network/Server application.	1		
33	SITC of 20 KVA Online UPS with Battery backup of 120 minutes	2	Nos.	
34	SITC of 1.5 Ton Split AC	5	Nos.	
35	SITC of 3.0 Ton Split AC 3 phase)	2	Nos.	
36	SITC of Video Processing Unit	2	Nos.	
37	Supply and Laying of 48 Core SM Fiber Cable (400 MTR)	800	Mtrs	
38	SITC of 48 Port LIU (fully loaded)	4	Nos	
39	SITC of Fiber Patch cord (Duplex) (3 Mtr)	32	Nos	
40	Supply and Laying of 33/40 mm HDPE Pipe	600	Mtrs	
41	SITC of CAT6 Shielded Patch Cord (2 Mtr)	20	Nos	
42	SITC of Aluminium Partitioning with 12 mm thick particle board & 12 mm thick Glass	1	Nos	
43	SITC of Short wave length laser-Based Absolute Smoke Detection system with all accessories as required.	1	Nos	
44	SITC of Fire Suppression System with all Pipes, Nozzle, cable and other accessories.	1	Nos	
45	SITC of 62.5 KVA Three phase Silent DG Set along with other accessories i.e. Manual Control Panel with GPRS Enable, Fuel tank, Battery with leads.	1	Nos	
46	SITC of 5MP Outdoor IR PTZ Camera	10	Nos	
47	Manpower (Skilled) for 60 months	8	Nos	

^{**}The Institute may or may not procure these items. Bidders shall not have any right in this regard and the rate quoted shall not be considered for determining L1.

Authorized	Official	with	Seal
	Authorized	Authorized Official	Authorized Official with

SECTION 9

PREVIOUS SIMILAR ORDER EXECUTED

The bidder give the details of purchase orders of identical or similar equipment supplied to any IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs as per below Format for the period of 2021-22 to 2023-24

Name of the Firm ____

Order claced by (Full address of Purchaser)	Order No. and Date	Description and quantity of ordered equipment	Value of Order	Date of completion of delivery as per contract	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those	Has the Equiproper being installed satisfact (Attack Certific from the Purcha Consignation of the Equipment	ment ed ctorily n a cate	Contact Person along with Telephone No., Fax No. and e- mail address.
					quoted to us			
Peports) Details of T Name of handle a	Technical Ex of application	xpert on specialist t the quoted p	/ Servi	ce Engineer during the w	who have the to arranty period.	echnical	•	etency to
Petails of Tolerands of Toleran	Technical Ex of application and support f the organi	xpert on specialist t the quoted p zation	/ Service	ce Engineer during the w	who have the to arranty period. Name of Contact	echnical Person	Contac	etency to
Details of T Name of handle a Name of	Technical Exof application and support f the organical of the organical support f the organical suppor	e Manufacture	/ Service or oduct of the service of	ce Engineer during the w	who have the to arranty period.	echnical Person	Contac	etency to
Place:	Technical Exof application and support f the organi	xpert on specialist t the quoted p zation	/ Service or oduct of the service of	ce Engineer during the w	who have the to arranty period. Name of Contact	echnical Person	Contac	etency to

BID SUBMISSION

Online Bid Submission:

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below:-

Envelo p (Follow)		s to be provided as single PDF file)	
Sl. No.	Document	Content	File Types
1.	Technical Bid	Technical Compliance Sheet, compliance sheet of essential pre bid criteria	.PDF
2.	1	Organization Declaration Sheet	.PDF
3.	1	Checklist, Tender Acceptance, Tender Form, Annexure I etc.	.PDF
4.		List of organizations/ clients where the same products have been supplied during 1 st April 2021 to 31 st March 2024 along with their contact number(s). (Annexure-III)	
5.		Technical supporting documents in support of all claims made at Annexure-I	.PDF
6.	1	EMD and Tender fee submission proof	.PDF
7.		Certificate as per Annexure VI, Annexure VII, VIII on the letterhead of the company	.PDF
8.		Brochure of quoted product, Other Documents, if any which are not covered above	.PDF
Envelop	ne – 2		
Sl. No.	Document	Content	
1.	Financial Bid	Price bid Form should be submitted in PDF format.	.PDF
2.		BoQ in .xls Format	.XLS
3.		BoQ in .pdf Format*	.PDF

Note: In case any difference arises between the price quoted in BoQ in .xls format and BoQ in .pdf format, the highest quoted price between the two will be considered for the purpose of financial evaluation of bid.

ORIGINAL EQUIPMENT MANUFACTURER (OEM)/ MANUFACTURING AUTHORISATION FORM (MAF)

(On Letter Head of Manufacturer)

Tender No.:- Date:
To The Chairperson Campus Surveillance System Institute Purchase Cell Indian Institute of Technology (Banaras Hindu University) Varanasi-221005
Dear Sir,
We manufactures of original equipment at (address or
factory) do hereby authorize M/s (Name and address of Agent) to submit a
bid, negotiate and receive the order format against your tender enquiry. M/s.
is authorized to bid and conclude the contract in regard to this
business. We hereby extend our full guarantee and warranty as per clause of the terms and
conditions this Tender for the goods and services offered by the above firm.
We also confirm that we will ensure all support for our products delivered against this Tender by
aforementioned firm to IIT (BHU) during warranty period, Maintenance Contract period and next 10
years after the closure of contract.
Yours Faithfully,
(Name)
(Name & Seal of Manufacturers)

DECLARATION

(to be submitted on the letterhead of Company)

To, The Chairperson Campus Surveillance System Institute Purchase Cell Indian Institute of Technology (Banaras Hindu University) Varanasi-221005

Ref.: OM No. F.7/10/2021-PPD(1) Ministry of Finance, Govt of India dated 23.02.2023.

Sir/Madam,

We certify as under:

We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries, and solemnly certify that we fulfill all requirements in this regard and are eligible to be considered.

We certify that:

(a) We are not from such a country or, if from such a country, we are registered with the Competent Authority (copy enclosed).

and;

(b) We shall not subcontract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

DECLARATION OF LOCAL CONTENT

[Declaration / Certificate to be provided by Statutory Auditor or Cost Auditor of the Company (in case of companies) or from a practicing Cost Accountant or practicing Chartered Accountant (in respect of suppliers other than companies) for tender value above Rs. 10 crores]

To
The Registrar
Indian Institute of Technology
(Banaras Hindu University) Varanasi,
U.P.– 221005, India

Subject: - Declaration of Local Content

Tender Reference No:	
Name of Tender/ Work:	

We hereby certify that the goods / software / solution being offered by us vide our proposal, comply with the provisions of Make In India (MII) Order No P-45021/2/2017-PP(BE-II)-Part(4)Vol.II dated 19.07.2024 issued by Public Procurement Division, Department of Investment and Internal Trade, Ministry of Commerce, GoI as amended from time to time.

We hereby certify the details pertaining to goods / software / solution offered by us, against the tender requirement is given below:

Sr No	Item Description, Make, Model	of origin	Manufacture of	0	*Consolidated MII % for the offered solution
1	Item 1				
2	Item 2				
••••					
3	Item n				

^{*}The Consolidated MII % for the offered solution shall be considered for determining "Local content".

"Local Content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

We are solely responsible for the abovementioned declaration. False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law."

Note:

- 1. It is mandatory for bidders to quote items having local content minimum 20%.
- 2. The Country of origin / manufacturing should be declared for goods/ software/ solution being offered.

- 3. IIT(BHU) reserves the right to Accept / Reject / Cancel the bid / bidder, at its sole discretion, based on the responses received against the MII and Land border sharing declarations submitted by the bidders / vendors.
- 4. While declaring the Local content percentage, the aforementioned OM must be taken into consideration by the bidders/OEMs. In case of any ambiguity/doubt the bidders may visit DPIIT website https://dpiit.gov.in/sites/default/files/FAQ_PublicProcurement_22April2024.pdf.

Yours faithfully,

(Signature of the bidder, with Official Seal)

UNDERTAKING

(to be submitted by the bidder on their letter head)

To, The Chairperson Campus Surveillance System Institute Purchase Cell Indian Institute of Technology (Banaras Hindu University) Varanasi-221005

I/We (name of the representative(s)) representing M/s hereby confirm that we agree to give presentation and demonstration of the Proof of Concept as part of Technical Evaluation of this tender as per the schedule notified by IIT(BHU).
I/We confirm that we will demonstrate the PoC with the same make and model which have been quoted by us against this Tender reference no
I/We further confirm that the solution/system offered/quoted against this tender are fully compatible with the existing network infrastructure of IIT(BHU).
We confirm that no information has been concealed/ hidden by us.
If at any point of time during the tender process, it has been found that we have concealed any information our bid is liable to be rejected from further tendering process.
I/We shall be solely responsible for the above information.
Signature
Name of Representative:
Name of Bidder:
Address:
Mobile No
Email:

PROOF OF CONCEPT (POC) REQUIREMENT

During the POC stage, rooms where POC equipment are installed by Bidder will remain under the custody of IIT (BHU) till completion of POC. Bidders must ensure that the make and model of Hardware & Software used in POC must be of the same model & series as offered in their submitted bids. The same will be verified by the IIT (BHU) authorities.

Please note that the offered Solution should be compatible with the existing network of the Institute. All expenses for the POC (including testing charges, if any) will be borne by the bidder.

Functional Requirement:

Bidders shall have to demonstrate all features/ configuration of the offered solution to IIT (BHU) or its authorized representative as per points mentioned below failing which their bid shall not be considered for further processing.

Sr. No.	Equipmen t	Quantit y	Functionality	Checked (Yes/No)
1	VMS	2 clients	Verify live and playback @full HD or higher resolution	(103/110)
			Zoom and PTZ verification from VMS Client	
			Demonstration and generation of reports	
			Verify Alarms in VMS Client	
2	5MP Bullet	6 nos	Verify Physical Products	
			Verify Make and Model number of the offered solution	
			Verify video resolution, Frame Rate, Stream Capability and White Dynamic Range (WDR)	
			Verify and demonstrate Motion detection,	
			Intrusion and Tampering detection Analytics	
			Mac Address of the Cameras Should be of the same OEM	
3	5MP PTZ	2 nos	Verify Physical Products	
	Camera		Verify Make and Model number of the offered solution	
			Verify video resolution, Frame Rate, Stream Capability and White Dynamic Range (WDR)	
			Verify and demonstrate Motion detection, Intrusion and Tampering detection Analytics	
			Mac Address of the Cameras Should be of the same OEM	
4	SITC of 8	1 piece	Verify Physical Products	
	Port PoE		Verify Make and Model number of the offered	
	Switch		solution	
	with 2 Port		Mac Address of the Switch Should be of the same	
	Fiber		OEM	

END OF DOCUMENT