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PARALA MAHARAJA ENGINEERING COLLEGE

(An autonomous college affiliated to Biju Patnaik University of Technology, Odisha, Rourkela)

SITALAPALLI, BERHAMPUR, DIST- GANJAM, PIN – 761003

No. PMEC/Estt./1810

Date: - 31/07/2025

Tender Document for Supply, Installation, Testing and Commissioning of IP-based Digital CCTV, Wifi and LAN system at central library, PMEC, Berhampur

PART I (TECHNICAL BID)

Submitted by

Name of the Bidder: _____

Postal Address for Communication: _____

Mobile No: _____

Email Id: _____

Date of availability of Tender Document : 31/07/2025
on the website

Last Date and Time of Submission of : 30/08/2025

Estimated Cost of the tender : Rs. 75,14,501/-

EMD amount : Rs. 3,75,725/-

Date & Time of Opening of Technical bid :

Date & Time of Opening of Price bid :

The Document is prepared by PMEC, Berhampur consisting of Pages-1 to 64. It should not be reused, copied, or used either partially or fully in any form. The information provided by the bidders in response to this quotation document will become the property of PMEC, Berhampur and will not be returned.

Terms and Conditions for Submission of Bid

1. **Bidder's Eligibility Criteria:** The bidder should verify its eligibility criteria as mentioned below before submitting the tender and enclose the required documents in the technical bid in the sequence listed below, to avoid rejection or disqualification of the tender. The bidder should meet the following criteria.
 - (a) The Bidder should be the OEM (Original Equipment Manufacturer) or Authorized system Integrator/ Authorized Dealer of the OEM of the offered product. OEM has to submit an up-to-date copy of the Industry Registration and a Tax Registration Certificate issued by the competent authority. The Authorized Dealer has to submit OEM's authorization letter, in original, on the OEM's letterhead duly ink-signed by the authorized signatory of OEM. The letter should mention OEMs contact numbers, email addresses and websites with whom the authenticity of the letter can be cross-checked.
 - (b) Original Equipment Manufacturer/Authorized system Integrator/Authorized Dealer for IP-based Digital CCTV, Wifi and LAN system shall have a base with technical support function and service network across India. The Bidders have to submit OEM's authorization, in original, on the OEM's letterhead, in support of OEM's service/support centres located at Bhubaneswar/ Berhampur in the state of Odisha, duly ink-signed by OEM.
 - (c) Must have wide experience of successful installation in CCTV, wi-fi and LAN at a minimum of 5 national/state level higher education academic institutions, out of which, 2 should be from Odisha State. All sites should be operational for at least the last 1 year. Necessary supporting documents like purchase orders, work completion certificates, payment certificates etc. for the last three years to this effect must be submitted along with the offer.
 - (d) The bidder should be a registered company making a profit for the last three years, having a good business track record. The average annual turnover of the company should be more than **Rs. 38 Lakhs** for authorized dealer/distributor and **Rs. 3 Crores** for OEM in the last three years.
 - (e) Bidder should furnish an undertaking confirming that the technical committee of the purchaser can visit the manufacturing unit of the bidder to evaluate technical aspect, production capacity/customization capability etc. before opening of financial bid. Financial bid shall be opened only once the bidder's manufacturing setup is approved

- by committee.
- (f) The bidder should be a registered firm in Odisha, having valid GST/CST/VAT/PAN/TIN/Service Tax etc.
 - (g) All after-sales support should be provided directly by the OEM through the bidder.
 - (h) The bidder should provide a 5-year Standard Warranty for all hardware (equipment/spares/accessories/any item etc) for the complete CCTV, Wifi and LAN products and a 1-year Standard Warranty for free technical support and software/hardware maintenance obligation. After the expiry of which free maintenance obligation, the bidder must be willing to provide maintenance service for the next 4 years under the Comprehensive Annual Maintenance Contract (CAMC). The bidder should also provide support regarding time-to-time installation, maintenance and configuration of CCTV, Wifi and LAN system with no extra cost during these five years.
 - (i) The Bidder and OEM must not be blacklisted and/or debarred from any govt./non-govt. institute of India in the last 10 years. The declaration on Rs.100 stamp paper with the sign of any director from the bidder and OEM, both need to be submitted with the bid.
 - (j) In case of CCTV system, the cameras and NVR must be from single manufacturer. Similarly, all Wifi and LAN products should be from single Manufacturer.
 - (k) The Bidder/OEM must be a registered Firm in India with the Registrar of Companies and in business for the last 10 years or more.
 - (l) The Bidder/OEM should have the support office at Bhubaneswar/Berhampur and the support office address must be visible on the website of the Bidder/OEM.
2. Bidders may visit the college, at their own expense, on any working day during office hours so as to acquaint themselves with the (i) site conditions (ii) scope and extent of work etc where the job is to be carried out before quoting the rates.
 3. The Bidder shall have the single point responsibility for the complete Turnkey solution including supply, installation, testing & commissioning and maintenance.
 4. The bidder should have the necessary ISO Certificates.
 5. The bidder must have successfully executed/completed Three similar services costing not less than the amount equal to 40% (Forty per cent) of the estimated cost or Two similar completed services costing not less than the amount equal to 50% (Fifty per cent) of the estimated cost; or One similar completed service costing not less than the amount

equal to 80% (Eighty per cent) of the estimated cost for the supply of CCTV, Wifi and LAN system in any Central Government/State Government/PSU/Educational Institute library, during the last 3 years. The details of such orders must be given in Annexure III.

6. **Cost of tender documents:** The tender documents can be downloaded from the Institute website **www.pmec.ac.in** and bidder has to deposit a Demand Draft equal to the cost of tender documents of Rs.2000/- (Rupees Five Thousand Only) (Non-refundable, Non-adjustable and Non-transferable) in favor of “Principal, Parala Maharaja Engineering College, Berhampur” drawn in any Nationalized Bank payable at Berhampur.
7. **Earnest Money Deposit: Rs. 3,75,725/-** in the shape of a Demand Draft in favour of “**Principal, Parala Maharaja Engineering College, Berhampur**” drawn in any Nationalized Bank payable at Berhampur. The EMD of the unsuccessful bidder shall be returned within fifteen days of the finalization of the purchase order. The Institute shall not be responsible for any non-receipt of the EMD by post.
8. This tender documents must reach “The Principal, Parala Maharaja Engineering College, Sitalapalli, Berhampur, Ganjam-761003 (Odisha)” by the last date of submission under a sealed cover by registered/speed post only. The tenders received after the due date & time are liable to be rejected. The Institute is not responsible for any delay, loss or non-receipt of tender documents sent by post. Submission of tender by FAX/e-mail/Courier will not be entertained.
9. This tender document must be filled in completely and signed by the authorized signatory of the bidder on all the pages as acceptance of the guidelines, terms and conditions laid in this tender document, otherwise, the bid shall become invalid. (This document should be printed on both sides of the A4 size paper sheet).
10. The signature at the end of each page of the tender document must be accompanied by his/her full name and role in the company (Sole proprietor/Partner/Director etc.)
11. The tenders shall be opened in the presence of the bidder or their authorized representative on the due date and time as specified in the tender document. The name and address of the representative authorized to attend the opening of the tenders on behalf of the bidder should be indicated in the tender. The representative so deputed should also bring with him a letter of authorization from the firm for having been authorized to be present at the time of opening of tenders and are required to sign an attendance sheet. Only one representative per firm shall be permitted to attend the opening of the tenders.
12. If the date of opening of the tender happens to be a holiday, a revised schedule will be

notified. However, in the absence of such notification, the tender will be opened on the next working day. The time and venue remain unaltered.

13. Any additional information, bidders wish to provide may be attached separately.
14. **Documents Comprising the Bid:** The bid prepared by the bidder shall be in English and shall comprise two parts i.e. (1) The Technical Bid and (2) Financial Bid. In case any bidder encloses the financial bid within the technical bid, the same shall be rejected.

Part I (Technical Bid): To qualify for the Technical bid, the bidder should have the minimum eligibility criteria as under and the bidder in this regard must submit the following documents in support of his eligibility criteria;

- (a) Demand Draft (non-refundable) towards the cost of tender documents in favour of **“Principal, Parala Maharaja Engineering College, Berhampur”** drawn in any Nationalized Bank payable at Berhampur. Demand draft towards EMD in favour of **“Principal, Parala Maharaja Engineering College, Berhampur”** drawn in any Nationalized Bank payable at Berhampur. Both DDs should be made separately.
- (b) Duly filled-in Information Sheet of the bidder along with enclosures (**Annexure-I**).
- (c) Documentary proof such as PAN, Incorporation Certificate, Factory License and Trade Mark Certificate for their Brand Name in case of indigenous products, should be submitted
- (d) Profile of the organization along with the list of personnel including skills and competence in an organization.
- (e) Unconditional acceptance letter of undertaking for the terms and conditions of this tender documents in the prescribed format (**Annexure-II**)
- (f) Self-attested copy of up-to-date IT PAN of the firm, Odisha GST registration certificate etc., issued by appropriate government authority for the required services with sale.
- (g) Financial Status: The average annual turnover of the firm should be more than **Rs. 38 Lakhs** in the case of an authorized dealer/distributor in the last three years. Whereas the average annual turnover of CCTV OEM should be more than **3 crores**. Copies of profit & loss account and balance sheet duly authenticated by a chartered accountant for the last three years.
- (h) Certificate along with documentary proof of latest GST Return, EPF Challan and ESIC Challan of the bidder is to be submitted.
- (i) Copy of Income Tax return acknowledgement for the last three years of the bidder

to be submitted.

- (j) Bidders should submit a copy of an up-to-date valid certificate of OEM/Business partner/ authorized system Integrator/Partner for the CCTV, Wifi and LAN system. Tender Specific authorized Letters from OEMs must be submitted.
- (k) OEM should submit a declaration letter on OEM letterhead duly ink-signed and stamped, declaring that the supplied products are of **five-year** warranty and the same will be verified from the OEM for genuineness.
- (l) List of user's clients related to experience of execution of similar work in central/ state Govt departments, PSU's, Autonomous bodies, Large Industrial, Educational campus, where similar services (Supply and Installation of CCTV, Wifi and LAN system) are to be provided by the agency for the clients along with address and telephone numbers with supporting documents like purchase orders, work completion certificate, payment certificate etc. for last three years to this effect must be submitted along with the offer (**Annexure-III**)
- (m) The bidders must enclose an affidavit on Non-Judicial Stamp Paper of Rs. 100/- that it has never been blacklisted/debarred/banned for any of the products by any Government /Semi-Government/PSU/Banks/University/Educational institute/ Autonomous body or punished by any court for any criminal offence/breach of contract and no police/vigilance enquiry/criminal case is pending against him or company/agency as the case may be.
- (n) The bidder should have a local Branch at Bhubaneswar/Berhampur to provide prompt after-sales/service support. Details such as address, contact number, mail ids, GST No. etc. should be provided. Proof of support office address needs to be submitted with the tender.
- (o) Two self-attested envelopes of size 11" x 5" (or above) with complete address with pin and contact no written for future correspondence.
- (p) Two self-addressed slips of size 6" x 3" (or above) with complete address with pin and contact number written for future correspondence.
- (q) In OEM letterhead, technical compliance form for the technical Specification of items with make & model must be filled up properly without any ambiguity as per **Annexure-IV** failing which the tender paper shall be rejected. The bidder has to furnish one make & one model of each item looking into the compatibility of the system. The bid shall be rejected quoting more than one make/model.

- (r) Detailed literature along with the make, model, design, datasheet, pamphlets/catalogue and performance curves as applicable.
- (s) Copies of ISO 9001, ISO 14001, ISO 45001, ISO 50001, and ISO 13485 is to be attached for CCTV OEM. Copies of ISO 9001, ISO 14001, ISO 45001 are to be attached for LAN, Wi-Fi and Passive products OEM.
- (t) Copy of BIS certificate for applicable product category as per Govt circulars.
- (u) The bidder should submit EPF Registration Certificate and ESIC Registration Certificate along with documentary proof of the latest GST Return, EPF Challan and ESIC Challan.
- (v) Other annexures duly filled in and signed with official seal and any other document in support of the eligibility of the bidder.

Part II (Price Bid): The price bid shall specify the following.

- (a) The hard copy of price bid for Supply, Installation, Testing and Commissioning of the CCTV, Wifi and LAN system for central library at PMEC, Berhampur as per technical specification and scope of work in Indian Rupees only in the **Annexure-VIII (A)**.
- (b) Charges for CAMC of CCTV, Wifi and LAN system at PMEC, Berhampur in the **Annexure- VIII (B)**.

15. Submission of Tender: Sealing and Marking of Bids

The bidder shall wax seal the technical bid and financial bid in two separate envelopes, clearly super scribing on the covers “**Part I – Technical bid for Supply and Installation of CCTV, Wifi and LAN system**” and “**Part II – Price Bid for CCTV, Wifi and LAN system**” and also indicating on each of the covers the “**Tender call Notice Number & Date**” and **Due date and time of submission** as mentioned in Tender Call Notice. These envelopes (Part I and Part II separately) should be addressed to “The Principal, Parala Maharaja Engineering College, Sitalapali, Berhampur, Ganjam-761003.

Envelopes 1 & 2 should be submitted in a 3rd big envelope super-scribing “**SITC of IP based Digital CCTV, Wifi and LAN system for the central library at PMEC, Berhampur**” and addressed to “The Principal, Parala Maharaja Engineering College, Sitalapali, Berhampur, Ganjam-761003.

- 16.** The tender is liable to be cancelled, and the EMD shall be forfeited in the event of any failure to comply with any of the clauses of the terms and conditions of this tender call document or in the event of the bidder withdrawing his offer before/after finalization of

this selection process. A bid without the required EMD amount will be summarily rejected.

17. Bid shall remain valid for 120 days after the date of bid opening. The bid valid for a shorter period shall be rejected by the Institute as non-responsive. In exceptional circumstances, the Institute may request for the consent of the bidder for an extension to the period of bid validity.
18. To assist evaluation and comparison of the bids, the Institute at its discretion may ask the bidder for clarification of the bid. The clarification and response from the bidder shall be in writing.
19. The Institute reserves the right at the time of award of the order to increase or decrease the quantity of the goods and services specified in the schedule of requirements without any change in unit price of the ordered quantity and to exclude specific goods listed in the schedule of requirements from the order.
20. The Institute reserves the right to reject any or all the tenders without assigning any reason and the decision of the Institute shall be final and binding.
21. The Institute reserves the right to call the bidders and conduct negotiations, if necessary and has the right to select more than one bidder, one bidder for one or more items at its discretion.
22. Any deviation in specification, terms and conditions shall not be entertained. The institute reserves the right to add/delete/change/modify any of the specifications, terms and conditions of this tender call document if it is necessary during the process of execution of the work.
23. The Institute reserves the right to order all or part or none of the items and/or services given in this schedule. The Institute also reserves the right to order additional services based on the rates finalized as a result of this tender.
24. At any time prior to the date of submission of tenders, the Institute may, for any reason, or decision, modify the terms & conditions of the tender document by a corrigendum displayed on the website of PMEC (www.pmec.ac.in). In order to provide reasonable time to take the amendment into account in preparing their bid, the Institute may or may not at its discretion, extend the date and time for submission of tenders.
25. **Technical Evaluation of Bids**
 - a) Detailed technical evaluation shall be carried out by the Technical Evaluation Committee pursuant to conditions in the tender documents to determine the

responsiveness of each tender. For this clause, the substantially responsive bid is the one that confirms all the eligibility and terms and conditions of the tender without any material deviation. The institute's determination of bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. The institute shall evaluate the technical bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are in order.

- b) The technical evaluation committee may call the responsive bidders for discussion or presentation to facilitate and assess their undertaking of the scope of work and its execution. However, the committee shall have sole discretion to call for discussion/presentation.
- c) Financial bids of only those bidders who qualify the technical criteria will be opened, provided all other requirements are fulfilled.
- d) A bid determined as subsequently non-responsive will be rejected by the institute.
- e) PMEC, Berhampur shall have the right to accept or reject any or all tenders without assigning any reason thereof.

26. Financial Evaluation and Comparison of Bids

- a) The financial bid of only those bidders shall be opened who have been found to be technically eligible as enumerated earlier. The financial bids shall be opened in the presence of representatives of technically eligible bidders, who may like to be present. The Institute shall inform the date, place, and time for the opening of the financial bid.
- b) The rates must be quoted as per the format prescribed. The quoted price must be inclusive of all taxes including GST, freight, packing, forwarding, transit insurance etc. and must be shown clearly against each entity for delivery at the site. The installation, commissioning, demonstration and training shall be at the supplier's cost.
- c) Bidder shall quote the rate price of all taxes and other costs while quoting for the tender in **"Part -II: Financial bid"** to be kept in Envelop No. 2. Income Tax will be deducted at source from the bills as applicable.
- d) Arithmetic errors shall be rectified on the following basis. If there is a discrepancy between the unit price and total price, the unit price shall prevail and the total price shall be corrected by the institute. If there is a discrepancy between words and

figures, the lesser amount shall be considered valid. If the supplier does not accept the correction of the errors, his bid shall be rejected.

- e) Quoting the minimum rate just for acquiring the tenders will not be the only criterion for the award of the contract. Therefore, bidders should carefully assess the work before offering the rates. The tenders will be evaluated based on total cost which will include the capital cost quoted for the system and the rates quoted for CAMC for a period of 4 years. Payment terms for CAMC will be as half-yearly payment after satisfactory completion of the service.
- f) The purpose of bid evaluation is to determine a substantially responsive bid with **the lowest evaluated price**, but not necessarily **the lowest submitted price**, which should be recommended for award.
- g) The total evaluated cost will be the total cost required for the work in **Annexure-VIII(A)** and rate quoted for the CAMC in **Annexure-VIII(B)**, which will be considered for the ranking/evaluation.
- h) The P MEC, Berhampur does not bind himself to accept the lowest bid or any bid and reserves the right of accepting the whole or any part of the bid or portion of the job offered and the bidder shall provide the same at the rate quoted. The P MEC, Berhampur reserves the right to reject any or all offers received in response to the tender or cancel or withdraw the tender notice without assigning any reasons, whatsoever.

27. Bid Price and its validity

- a) The bidder shall give the total composite price inclusive of all levies and taxes (inclusive of taxes) as per the price schedule given in **Annexure VIII**.
- b) The bid is strictly on an item rate basis. However, the college may increase or decrease the quantity before placing the order, without assigning any reason thereof.
- c) The bidders must quote the final rates in clear and unambiguous terms in Indian Rupees only. No foreign exchange will be made available by the institute.
- d) Bidders are requested to quote their prices on a firm & fixed basis for the entire period of the contract. Bids of the firms received with prices quoted on a variable basis shall be rejected without assigning any reason and no communication in this regard shall be made.
- e) The tender along with the prices shall remain valid initially for a period of 120 days from the date of opening of Part II of tender, which period may be further extended

by mutual agreement in writing by bidder and the bidder shall not cancel or withdraw the tender during this period.

28. Award of Contract: Placement of Order

- a) The institute shall consider the placement of the purchase order for the job which has been found technically, commercially and financially acceptable. The Institute reserves the right to counter offer price against the price quoted by any bidder.
- b) The evaluated lowest bidder will be awarded the purchase order to supply the CCTV, Wifi and LAN system.

29. Performance Bank Guarantee

The successful Bidder shall furnish Performance Bank Guarantee within 21 days after the issue of the purchase order for an amount equal to 5% (Five Percent) of the Contract Price in favor of “Principal, Parala Maharaja Engineering College, Berhampur” issued by any Nationalized Bank valid up to sixty (60) months (**Annexure-VII**).

The Performance Bank Guarantee shall be refunded after sixty (60) months from the date of successful completion of the work as per order.

No interest will be paid on Performance Bank Guarantee/ Earnest Money Deposit.

The Performance Bank Guarantee is liable to be deducted/forfeited for any or all the following reasons:

- a) Unusual delay in complying the service request (if any).
- b) Termination of contract or delivery defaulters.
- c) Any default, failure or negligence in fulfilling the contract, Losses incurred by the Purchaser during the warrantee period.

30. Payment Terms

- (a) No advance payment is allowed by the Purchaser to the supplier for any deal.
- (b) The Institute will make payment through online mode (NEFT/RTGS etc.) to the supplier.
- (c) No interest on any deferred claim arising out of this purchase shall be payable in any case whatsoever. No payment will be made for goods rejected at site during installation and commissioning.
- (d) The standard payment terms (subject to recoveries, if any) upon submission of required documents shall be as follows:
 - (i). The supplier should submit the bills in triplicate on printed forms only. The billing must be done with GST billing norms.

- (ii). The 90% of the billed amount will be released only after receiving the items in good condition, successful installation, and commissioning of the Desktop Computers on premises as per the specification along with other terms and conditions stipulated in the purchase order and certified by PIC (library).
- (iii). The balance 10% will be released after 60 days of satisfactory on-site performance from the final date of installation and commissioning of all Desktop Computers against the Bank Guarantee of 5% of the total project value.
- (iv). All payments will be released based on separate invoices submitted to the college by the bidder.

31. Standard Warranty and Comprehensive Annual Maintenance Contract

The bidder will provide a Standard Warranty/guarantee for all hardware (equipment /spares/accessories), and software for a complete CCTV, Wifi and LAN system for five years. However, if any individual component has a standard warranty of more than five years offered by manufacturers, the same will prevail.

The bidder shall provide onsite support/free maintenance/services for the first year only. Further, after one year of standard warranty for free maintenance, the bidder should be able to provide maintenance/services through CAMC for the remaining 4 years for a complete CCTV System, the cost of which should be quoted separately. It is the responsibility of the bidder to handle all maintenance tasks, whether minor or major and to have adequate standby equipment on hand to ensure the system remains functional within 24 hours of any disruption.

- (a) The successful Bidder has to warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the work order.
- (b) The successful Bidder further has to warrant that the Goods supplied under this Work Order shall have no defect arising from design, materials or workmanship (except when the design and/or materials required by the Institute's specifications) or from any act or omission of the successful Bidder, that may develop under normal use of the supplied goods.
- (c) All the equipment including the accessories supplied as per the technical specification as mentioned in the bidding document should carry a standard warranty (including all spares and accessories) for a period mentioned in this document. During this period, the successful Bidder shall replace all defective

parts/accessories/consumables, attend to all repairs/break downs and undertake a stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful Bidder during the warranty period. The items which are not covered under warranty should be clearly mentioned along with the rate of the items.

- (d) On expiry of the comprehensive warranty period, the successful Bidder shall be willing to provide after sales support for an additional period prescribed in this document.
- (e) The prospective Bidder shall submit an undertaking from the Original Equipment Manufacturers (OEM) that they are willing to provide spare parts for the period of warranty as mentioned and also during the additional CAMC period if awarded. The OEM shall also assure continuity of service to their product, in the event of change in dealership or the Bidders – their existing dealers couldn't provide service during the warranty/CAMC period. The undertaking from OEM is an essential document forming part of the Technical Bid, without which the tenders will be rejected summarily in the first round itself.
- (f) After-sales service centre in **Bhubaneswar/Berhampur (Odisha)** should be available as a part of the pre-qualification and the Bidder shall provide proof of their capability to undertake such maintenance/repair within the stipulated time.
- (g) The successful Bidder shall provide preventive maintenance as per the frequency mentioned in this document during the warranty period. The Bidder shall attend any number of breakdown/repair calls as and when informed by the institute authority without any extra cost.
- (h) Upon receipt of such notice for repair/breakdown from the institute, the successful Bidder shall, within the period as specified in this document, and with all reasonable speed, repair or replace the defective goods or parts thereof, without cost to the college.
- (i) If the successful Bidder, having been notified, fails to rectify the defect(s) within the period specified in this document, the Institution may proceed to take such remedial action as may be deemed necessary, at the successful Bidder's risk and cost and without prejudice to any other rights which the Institution may have against the successful Bidder under the contract.
- (j) Failure to attend the repairs in time or failure to attend the stipulated preventive

maintenance visit or failure to replace the defective equipment or to provide stand-by equipment if the fault/down time exceeds the stipulated period or to ensure the stipulated up-time in a year shall lead to forfeiture of the performance Bank Guarantee and/or may lead to blacklisting/debarring of the defaulting Bidder.

- (k) The equipment which requires a quality assurance test shall be done free of cost immediately after installation, during the comprehensive warranty period, by the demand of the user and also when major spares are replaced.
- (l) Any mandatory approval required for installation shall be obtained by the successful bidder in liaison with the respective authorities.
- (m) The Bidder shall submit the parameters which require calibration and the frequency of calibration required.
- (n) The Bidder shall undertake on-site calibration of the equipment every year as part of the after-sales service during the period of comprehensive warranty, or on demand from the user.
- (o) The Bidder shall also have to submit whether periodic replacements of consumable items are required for the proper functioning of their quoted machine/Equipment. If yes they should submit the list of such consumables along with the price list and frequency of replacement per year if the same is not replaced free of cost during warranty/guarantee period.
- (p) The offered warranty also includes:
 - (i). Visits to the user institutions at frequencies prescribed as part of preventive maintenance.
 - (ii). Testing & calibration as per the technical/service/operation manual of the manufacturer or as per the period specified or as per the demand of the user.
 - (iii). Quality Assurance tests (if applicable).
 - (iv). The cost of labour for all repairs and all spares required for replacement during repairs of all kinds of accessories.
 - (v). The exclusion of warranty of any vital equipment parts will be compared with offers of other Bidders during the evaluation of the bids and this may be taken into consideration in deciding the successful Bidder based on expert advice.
 - (vi). The Bidder shall provide an up-time warranty of complete equipment as mentioned in this document, the uptime being calculated on a 24 (hrs) × 7 (days) basis failing which the warranty period will be extended as per the provisions

of the CAMC agreement.

32. Comprehensive Annual Maintenance Contract: (CAMC)

- (a) The decision to enter into CAMC for onsite support/services will be determined on the basis of the cost and complexity of the equipment by the Institute, at its discretion, prior to the expiration of the standard warranty period for onsite support.
- (b) The Comprehensive Annual Maintenance Contract (CAMC) is otherwise an extended warranty that covers the repair & maintenance of a product beyond one year standard warranty. The charges for CAMC shall include on-site support/ repair & maintenance /routine check-up charges only (all equipment/spares are covered under a 5-year standard warranty). All the terms and conditions agreed by the successful Bidder for executing 1-year Standard Warranty for free repair & maintenance shall be extended for the next 4-years during the period of CAMC, only difference being the payment of CAMC charges for maintenance services is absent during the period of initial 1-year standard warranty.
- (c) The cost of CAMC for next 4-years may be quoted along with service taxes, as applicable, if any. The taxes to be paid extra, are to be specifically indicated. In the absence of any such stipulation, the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
- (d) Failure/refusal on the part of the successful bidder supplying/installing the equipment to enter into CAMC with the Institute, at the end of the Comprehensive Warranty Period, if the Institute, as the case may be, desires so, may also result in the blacklisting/debarring of the Bidder.
- (e) The successful Bidder shall also indicate the rates for the CAMC in price bid form and such rates are binding on the successful tenders after the expiration of the warranty period. The yearly rates for CAMC shall remain the one and the same as quoted in the price bid form for the extended years.
- (f) The cost of CAMC will be considered for Ranking/Evaluation purposes.
- (g) The payment of the agreed CAMC charges will be made as per the frequency of payment after satisfactory completion of said period, on receipt of the service report/breakdown report from the user.
- (h) Payment of Comprehensive Annual Maintenance Contract would be made on half yearly basis after completion of work and satisfactory working report. The firm has to provide a minimum Uptime Guarantee of 95% (95% of 365 Days) per year during

the warranty period as well as during the Comprehensive Annual Maintenance Contract.

- (i) While calculating the total unit price of the item/system to be procured, expenditure to be incurred in the maintenance of the quoted item /system for a period of 1 year shall also be taken into consideration. Accordingly, it is mandatory for the bidders to submit the rate for a Comprehensive Annual Maintenance Contract for maintenance for a minimum period of 4 years.

33. Demonstration of Technical expertise: The firm/OEM/Bidder/Agency will be required to demonstrate the technical capabilities of the entire network and the functioning of each installed equipment at the place and time determined by the institute at their own expense.

34. Other Conditions

- (a) The successful bidder shall submit full address with phone no., fax no. and e-mail ID of the Contact person for after-sales service.
- (b) PMEC shall not adopt a call log procedure for call logging through the IVR system of the OEM for service or complaint launching.
- (c) The successful bidder is required to take care of the change in technology and supply a higher version of the hardware available at the time of delivery at the same total cost as per the order. The operating manuals and tools must be supplied.
- (d) No interest on any deferred claim arising out of this purchase shall be payable in any case whatsoever. No payment will be made for goods rejected at the site during installation and commissioning.
- (e) The Purchaser will not pay separately for transit insurance. The supplier is completely responsible for the delivery of goods in perfect condition and shall replace/ rectify the missing/defective parts if any at his own cost.
- (f) The purchaser shall not assign or makeover the contract, the benefit or burden thereof to any other person(s) or corporate body. The supplier shall not underlet or sublet to any person(s) or corporate body for the execution of the contract or any part thereof.
- (g) The goods to be supplied under the contract shall be fully insured against loss or damage incidental to the manufacture or acquisition, transportation, storage & delivery of the goods from the Warehouse / Factory / Ex- shop of the supplier to the delivery on “All Risk” basis including war Risks and Strike.
- (h) All bidders should watch and follow every day our website www.pmec.ac.in for any

updates.

- (i) The Institute reserves the right to cancel an item as ordered or cancel the whole order, if the college does not agree to a change of specification suggested by the bidder or if the bidder is not able to supply an item as per the changed specification required by the college or if there is no agreement on the revision price.
- (j) The Institute may reject the bid even if it is accepted but the successful bidder fails to execute any of the terms and conditions mentioned herein.

35. Jurisdiction and Right to Amend Rules: The Institute reserves the right to amend the rules of operation whenever and wherever considered necessary and appropriate. The same shall be intimated to the firm in due course. The Institute rules shall be binding for the execution of the contract. Further, in case of any dispute arising out of or in connection with the aforesaid contract either during subsistence of the contract or thereafter, the Principal of the Institute is the sole arbitrator to decide the same and his decision is final and binding on both the parties. If differences persist even after attribution and there are compelling reasons to go to the court, it will be decided in the proper Court of Law at Berhampur, Ganjam District only within the State of Odisha.

36. Odisha Small Manufacturing Enterprises (OSMEs): Micro and Small Manufacturing Enterprises located in Odisha (OSMEs) shall be given relaxation as per Odisha Procurement Preference policy for Micro and Small Manufacturing Enterprises-2023 (MSME Department Notification No. 566/MSME dated 24.01.2024). To avail such relaxation the bidder must produce a valid Udyam Registration Number (URN) and submit an undertaking in the shape of an affidavit in the format as given in **Annexure IX** along with the technical bidding document.

37. Delivery & Billing Address : The Principal,
Parala Maharaja Engineering College,
Sitallapalli, PO: Tanganapalli, Berhampur,
Dist. Ganjam (Odisha) 761003.

SCOPE OF WORK

The scope of the work is to provide a Turnkey Solution that should cover Supply, Installation, Implementation, Commissioning, Training, providing a user manual, providing 60 month Warranty for the total solution including all hardware, software, materials, services, and support etc. which should provide an Integrated CCTV, Wi-Fi, and LAN System for the central library at PMEC Berhampur.

1. Overview and Ensuring Solution of CCTV Surveillance System:

- (a) The CCTV Integrated Video Surveillance system shall be IP based & ONVIF System compliant with a distributed architecture having a separate control room for the viewing facility at PMEC Berhampur. Day and Night Surveillance Cameras shall be used at the required location. All the cameras should be capable of recording all the activities even at zero light and if any hard disk is crashed/defected then the bidder shall recover footage without data loss at no extra cost.
- (b) The proposed Solution should allow PMEC officials to centrally monitor its facilities. Any kind of configuration/setting to be done by the bidder without any extra cost.
- (c) The Solution should capture, store, and analyze digital Video images with audio to enable central monitoring, increase operational efficiency, reduce liability, minimize risk, and secure people & property.
- (d) The system should be provided with weatherproof IP dome cameras, fixed bullet cameras, lenses, housing & mountings to capture video with which, would be viewed & controlled through the Video Management Software, recorded, and stored.
- (e) The NVR shall make a continuous recording of all cameras for 24 hrs×7 days with hardware should have adequate storage for a period of minimum 15 days. If necessary, additional storage in the form of a hard disk drive shall be provided by the Bidder. Bidder should provide a Wireless mouse & keyboard for viewing & managing NVR/server/ workstation.
- (f) Laying, terminating & connecting Single mode 6-core Optical Fiber cable (OFC) in ring Topology with redundancy between field side racks equipped with PoE switches for connecting cameras & control room by using necessary Accessories like LIU, pigtail, fiber patch cords etc. The proposed Solution should allow Institute officials to locally and centrally monitor its facilities from a remote location on a Portable/Fixed personal computer monitor.

- (g) Wall mounting of Racks with 24-p patch panel & 24-p PoE switches in different locations with power supply provision
- (h) Installation of I/O port in position equals to number of cameras.
- (i) Supply & Laying of Cat-6 UTP from switch to I/O port with casing & capping.
- (j) Arranging tools, tackles, machinery, test instruments, consumables, skilled manpower, etc. complete in all respects for installation, testing, and commissioning of the system by the bidder.
- (k) On completion of the works and before the issue of the certificate of completion, the bidder shall provide inbuilt documents including manuals and operating instructions, software, software keys/passwords, and training to PMEC personnel in all aspects of system design, theory of operation of equipment, functional details, troubleshooting and familiarization with systems as per the scope of work, etc.
- (l) The bidder shall submit the complete bill of materials, drawings (Softcopy and 3 sets Hardcopy), technical data, information, technical literature for operation and maintenance, and other details required to fully establish the capability and performance of the equipment.
- (m) The materials offered by the Bidder as covered under the specifications of this work shall be fully in Compliance with the requirements stated herein.
- (n) Applications of the proposed System include tracking movements/Verification and recognition, through high-quality images, of persons and Objects including vehicles. The recordings of the scene of the Jurisdiction shall be helpful in case of enquiries etc. in establishing the truth. If required for any incident, PMEC has the right to call the bidder & bidder has to provide the event, time, day, Motion, etc. Recording to PMEC official.
- (o) All T&P, Scaffolding ladders/Hydra, Electrical instruments/meters for maintenance, consumable and Contingent Articles required for the execution of the work shall be arranged by the Agency. Nothing extra shall be paid on this account.
- (p) Chases, holes & drilling works, etc. shall be done using power-operated tools at the cost of the Contract. No extra will be paid for the same.
- (q) The successful vendor shall submit a detailed acceptance test procedure designed to demonstrate compliance with contract requirements at least 2 weeks before the start of testing. This procedure is to be approved prior to the start of the testing.

- (r) After all components (Cameras, NVRs, NVMS data switches, etc.,) have been commissioned, the vendor shall verify the overall system performance as specified.
- (s) Prior to system program commissioning, verify that each component has been installed according to the tender requirement and test, and bring it on-line.
- (t) The vendor shall complete all testing, adjusting the focus, picture clarity, right field of view & depth of view of cameras, etc., configuring the camera & NVR sets, etc., before requesting the client for testing.
- (u) Establishing CCTV control room with desired configuration, operation, monitoring & maintenance with Supply of one high resolution 55" LED Display for monitoring purposes, installation, configuration & customization of video software from the Control Room.
- (v) Software should be able to trigger & pop up Real-Time videos on the trigger of any Video Analytic Alarm. The software should be able to record for all the cameras with time stamping.
- (w) Drawings and Data Requirements to be submitted by the Bidder for the complete system like:
 - (i). Technical Architecture of the System.
 - (ii). Complete Bill of Quantity (BOQ)
 - (iii). Complete Data Sheet
 - (iv). Video Management and Software specification
 - (v). Test Records and Commissioning Documents.
 - (vi). Diagrams and Wiring connection.
 - (vii). Operation and Maintenance Manual
 - (viii). As-built drawings & rack elevation along with patching details i.e. acrylic laminated (Hard copy of visible size must be fixed on the wall of each rack lactation along with their soft copy)
 - (ix). Warranty certificate of the installed products on the letterhead of OEM with duly signed and stamped.
- (x) PMEC and its representative shall have the right to inspect and test each equipment at all stages of installation, testing, and commissioning of the system. During Site Acceptance Tests the performance of each equipment and system as a whole shall be measured and documented. Any failure/equipment switchover shall be documented. List of all equipment, spares/components etc. shall be prepared. If

during the 'Site Acceptance Test' any defect is noticed in the system, the Bidder shall rectify/ replace the same to the satisfaction of PMEC at no extra cost.

Installation and Commissioning

The Supplier shall be liable to complete all installation and commissioning of the IP-based CCTV Surveillance System at the site within 30 days from the date of receipt of the work order. All packing must be opened at the site and handed over to the consignee, at the supplier's cost in presence of our Technical Committee Member (s)/ PIC (CIF). Installation and Commissioning shall include the following:

- (a) Installation of the camera with manufacturing equipment/accessories should be done by the bidder as per OEM's manual/instructions.
- (b) It will be the responsibility of the bidder to provide all necessary spares and consumables, which may be required during installation and commissioning, at no extra cost to the purchaser.
- (c) The bidder is to bring their own instruments required for installation, testing, and commissioning, which can be taken back after completion.
- (d) Installation must be completed within 30 days after delivery on site.
- (e) The bidder should provide all necessary raw materials and consumables for running the system during commissioning.
- (f) A completion certificate regarding the commissioning of CCTV surveillance system to be furnished by the bidder.
- (g) After completion of the work a joint inspection report is to be submitted duly signed by the bidder and Technical Committee Member (s)/ PIC (CIF) of the Institute.
- (h) In case, guaranteed performance is not established, the bidder shall be given the opportunity to rectify/replace the items of the network, and restart the 7 days continuous trial operation, at the risk and cost of the bidder.
- (i) The bidders will have to follow all the security instructions applicable from time to time. If the engineers deputed by the firms are found guilty of any violation of security norms, they will be liable to be prosecuted under the law.

Training and Documentation:

Bidder shall provide complete technical documentation of hardware, related software, operating systems configurations, and customizations along with necessary diagrams. Bidder shall also provide project and design documentation. The documents shall include but not be limited to:

- (a) Factory/ Site test certificates of various equipment supplied.
- (b) Original Manufacturers manual and warranty cards.
- (c) Installation certificates of all equipment, description of configuration profile as executed for different equipment.
- (d) Troubleshooting chart for all equipment, Standard OEM checklist for installation, maintenance, etc., if any, Training documents. System Integrator shall provide training for a minimum of 7-days of installation, configuration, commissioning, monitoring, and troubleshooting of various equipment like NVR, storage, Backup system, access associated software, etc. to PMEC officials. The detailed contents, coverage, and Methodology for training will be decided mutually by the System Integrator and PMEC.

2. Overview and Ensuring Solution of Wi-Fi and LAN System:

- (a) PMEC, Berhampur has a well-developed Wired LAN setup with servers and internet bandwidth in the main academic building.
- (b) It is planned to set up both wired and wireless networks for the entire central library building of PMEC, which should be seamlessly integrated with the existing network of the institution, where multiple VLAN are functioning.
- (c) The access point/network modules should support all application software and network protocols.
- (d) The network needs to provide full coverage in areas from where users will access the network i.e. in rooms, Labs and reading room etc.
- (e) This controller should be capable to manage 500 clients at maximum level and should be based on Centralized WLAN controller, single point management for configuration for WLAN access.
- (f) The system should be put in place based on Site survey, technical bid, financial bid, selection process, Contract, Procurement, installation and system administrator's training, hand holding, running and upkeeping of systems including dusting, keeping them clean and safe etc. troubleshooting/maintenance done for the entire five years period.
- (g) Vendors are requested to do a detailed site survey before giving a quotation to understand the exact requirements. For site survey, vendors may contact PIC(CIF), PMEC Berhampur, through the email: procurement@pmec.ac.in .

- (h) Bidder will provide complete turnkey solution including all works like, laying of cables wherever required civil work, if any etc.
- (i) Laying, terminating & connecting Single mode 6-core Optical Fiber cable (OFC) in ring Topology by using necessary accessories like LIU, pigtail, fiber patch cords etc.
- (j) Wall mounting of Racks with installation and commissioning of 24-p patch panel & 24-p PoE switches in different locations with power supply provision.
- (k) Installation of I/O port and access point in different required positions.
- (l) Supply & Laying of Cat-6 UTP from switch to I/O port with casing & capping.
- (m) Arranging tools, tackles, machinery, test instruments, consumables, skilled manpower, etc. complete in all respects for installation, testing, and commissioning of the system by the bidder.
- (n) Drawings and Data Requirements to be submitted by the Bidder for the complete system like:
 - (i). Technical Architecture of the System.
 - (ii). Complete Bill of Quantity (BOQ)
 - (iii). Complete Data Sheet
 - (iv). Test Records and Commissioning Documents.
 - (v). Diagrams and Wiring connection.
 - (vi). Operation and Maintenance Manual
 - (vii). As-built drawings & rack elevation along with patching details i.e. acrylic laminated (Hard copy of visible size must be fixed on the wall of each rack location along with their soft copy)
 - (viii). Warranty certificate of the installed products on the letterhead of OEM with duly signed and stamped.
- (o) Commissioning of requirement and network integration with overall PMEC, Berhampur network will also be the responsibility of the vendors.
- (p) The vendors will provide a comprehensive warranty/guarantee with parts and onsite support for all the network equipment for a total five years and CAMC for next 4 years.
- (q) After 1 year of warranty period, the vendors should be able to maintain the system through a comprehensive AMC for another 4 years and the cost of which should be quoted separately for 4 years.

- (r) Any complaint/breakdown call reported should be attended to the same day within 2 hours by the 1st level local resident engineer. Further, any complaint/ breakdown call requiring repair/replacement/stand by equipment/2nd level support are to be rectified within 8 hours if reported before 6:00 pm and if reported after 6:00 pm shall be attended by 11:00 AM next day.
- (s) The simple operational difficulties etc. to be attended and sorted out within 2 hours of the complaint. The vendor will maintain a complaint register with cell phone for complaints to be registered and complaint no. to be given to the user for further reference.
- (t) Wireless equipment shall be high performance access (indoor) points and other equipment required shall be optimized for cost and efficiency.
- (u) Seamless connectivity throughout the zone for mobile users with laptops/PDAs.

Coverage & Availability:

- (a) No black hole/low signal within zone: there should not be any information access/communication black hole. The WLAN should be designed in such a way that there is nil or minimum interference between the wireless i.e., AP or any other wireless devices like medical equipment etc.
- (b) The WLAN should allow roaming across all the locations.
- (c) Secure user authenticated access, login, password, and usage logs etc. to be provided by the vendors in coordination with P MEC, Berhampur. There should be option for centralized/ uniform/universal access for access/login in all wired and wireless LAN of P MEC, Berhampur.
- (d) The bidder should have implemented similar solutions (Secure wi-fi set up with controller & LAN Components) deployed in Odisha in last three years. Minimum of one such supply order is needed with a completion certificate and performance certificate from the end customer.
- (e) All the cables should be of the latest industry standard and should be laid within conduits as per the latest standard laying procedure.
- (f) The complete installation of the network and implementation of the wireless controller should be done in a phased manner in consultation with PIC (CIF) to ensure minimum disturbance to the users.
- (g) P MEC, Berhampur or its representatives shall have the right to inspect or evaluate the hardware, software etc. to confirm their conformity to the ordered specification.

The supplier shall provide all reasonable facilities and assistance for inspection at no charge to PMEC, Berhampur. In case inspected tested features fail to conform to the specification, the office of PIC (CIF) PMEC, Berhampur may reject them, and the supplier shall either replace the rejected goods or make all alternations necessary to meet the specification required, free of cost.

- (h) The new setup should be seamlessly integrated with the existing network.
- (i) The design of the wireless Network and deployments should adhere to government norms and should comply with all its security measures.
- (j) All the equipment, cables and accessories must be handed over to the office of PIC (CIF), PMEC Berhampur in perfect working conditions.
- (k) All the active wireless devices should be of the same manufacturer. All switches and SFP modules should be from single OEM. All passive components including racks should be from a single OEM.
- (l) The offered product in the Wi-Fi solutions against the supply order shall be the latest version and should be under support for the next 5 Years. However, if any product declared as end of life product by the OEM during the supply period of materials, the bidders should supply replaced model or next higher model/version of the product.
- (m) The quantities for the components mentioned in the tender are the estimates only. The bidders may quote and include in their bill of quantities any components, which they deem are necessary for successful implementation of the project.

Installation and Commissioning

The Supplier shall be liable to complete all installation and commissioning of the Wi-Fi Network System at the site within 30 days from the date of receipt of the work order. All packing must be opened at the site and handed over to the consignee, at the supplier's cost in presence of our Technical Committee Member (s)/ PIC (CIF). Installation and Commissioning shall include the following:

- (a) Site location for installation of Access Points will be decided by PMEC authority.
- (b) Installation of the Access Points with manufacturing equipment/accessories should be done by the bidder as per OEM's manual/instructions.
- (c) It will be the responsibility of the bidder to provide all necessary spares and consumables, which may be required during installation and commissioning, at no extra cost to the purchaser.

- (d) The bidder is to bring their instruments required for installation, testing, and commissioning, which can be taken back after completion.
- (e) Installation must be completed within 30 days after delivery at site.
- (f) The bidder should provide all necessary raw materials and consumables for running the system during commissioning.
- (g) A completion certificate regarding the commissioning of Wi-Fi/Wired Network system to be furnished by the bidder.
- (h) After completion of the work a joint inspection report is to be submitted duly signed by the bidder and Technical Committee Member (s)/ PIC (CIF) of the Institute.
- (i) In case, guaranteed performance is not established, the bidder shall be given the opportunity to rectify/replace the items of the network and restart the 7 days continuous trial operation, at the risk and cost of the bidder.
- (j) The bidders will have to follow all the security instructions applicable from time to time. If the engineers deputed by the firms are found guilty of any violation of security norms, they will be liable to be prosecuted under the law.

3. Scope of work during Standard Warranty (SW) and Comprehensive Annual Maintenance Contract (CAMC) period:

- (a) The agency shall be solely responsible for comprehensive maintenance and upkeep of the system in good condition. The CAMC includes only services for high & low-end equipment.
- (b) Quarterly preventive maintenance service be done as per the maintenance schedule.
- (c) The preventive maintenance shall be prepared and submitted in advance to the PIC (CIF) by the Agency. The necessary shutdown may be taken with the prior permission of the PIC (CIF).
- (d) The unlimited breakdown service calls shall be attended to as and when required free of cost.
- (e) The machines will be kept under working conditions throughout the year except for certain eventualities of the service provider.
- (f) All major and minor jobs including turnkey-based full-phased maintenance jobs are responsibilities of the bidder.
- (g) The tools and tackles for the maintenance job will be provided by the agency at the site.

- (h) The scope of a Comprehensive Annual Maintenance Contract (CAMC) shall include all types of maintenance, repair, spares, consumable items, software, and support services to keep the system fully operational.
- (i) If any damage occurs in the system during the maintenance work shall be rectified immediately by the agency. No extra cost will be paid for this.
- (j) The service engineer deputed by the agency shall be well-qualified and have enough knowledge in the field of CCTV and networking systems.
- (k) The agency shall submit a service report to the PIC (CIF) after completion of the preventive maintenance and as well as breakdown maintenance.
- (l) The Warranty/Guarantee of new spare items installed against the faulty/damaged spares shall be covered.
- (m) If the bidder fails to give service, then legal action will be initiated against the agency as per rule and work will be done **by encashing their BG.**

Schedule of Attendance of complaints: -

- a) In case of breakdown, within 4 hours call should be attained (Subject to complaint logged between 9:00 am to 6:00 pm, Monday to Saturday barring national holidays)
- b) The agency shall respond to all calls and provide 7 × 24 hours and 365 days emergency service failing then legal action will be initiated against the agency as per rule and work will be done by encashing their BG amount by the PIC (CIF).
- c) If the hardware failure is detected, then the same will be rectified within 72 hours failing then legal action will be initiated against the agency as per rule and work will be done by encashing their BG amount by PIC (CIF).
- d) If the software failure is detected, then the same will be rectified within 24 hours failing then legal action will be initiated against the agency as per rule and work will be done by encashing their BG amount by the PIC (CIF).
- e) If any equipment gives continuous trouble, say 3 times in one month during the warranty period, the Bidder shall replace the same with new equipment without any additional cost to the purchaser.
- f) If any manufacturing or other technical defects are found within the warranty period, the same will have to be replaced or rectified free of cost by the Bidder.
- All repairs/replacement/servicing/fixing of the entire system shall be carried out only by the contractor/Bidder. PMEC Berhampur shall not permit or allow any party other than the authorized contractor/successful bidder to handle or deal with the equipment.

- Repair/replacement/servicing shall mean system testing, repair, and maintenance of the entire/total equipment for the proper functioning of the whole system. The CAMC includes repair & maintenance of complete CCTV, Wi-Fi and LAN system. The CAMC charges should include the expenses for preventive maintenance and routine check-ups and attending to breakdown calls as and when required.
- The contract is comprehensive and includes replacement, fitment, maintenance, and repair of all types of spare parts (Components/printed circuit board /power supply units/connectors & Electronics sub-systems, etc.), for replacement of defective parts and repair of the existing system and all related items. No extra charges will be payable by PMEC on account of spares.
- Any modification of software/software upgradation for the change in class of service and to provide the same additional facilities within the existing software provided in the system shall be covered under a warranty period of 5 years.
- Cleaning of components and their associated equipment in the project/units, periodically / as and when required so that the performance of the system does not deteriorate on this account, is in the scope of Warranty/CAMC.
- The Agency shall be solely responsible for the maintenance and upkeep of the equipment in good condition.
- The preventive maintenance schedule shall be prepared and submitted in advance. The necessary shutdown may be taken with the prior permission of the PIC (CIF).
- A suitable complete shutdown shall be given once a year for preventive maintenance of the complete system. All the equipment should be thoroughly checked and maintained for proper functioning/operations of the equipment.
- In case of any fault in the installation covered under this work requiring immediate rectification of the same to put the installation in running condition, the firm has to rectify the fault and if any material is required in doing so, shall also arrange the same within a reasonable time.
- The agency shall keep a minimum of spare and consumable materials in its custody for maintenance and attend to the breakdowns.
- Round-the-clock watch of the equipment shall be the Agency's responsibility and any losses and damage to the equipment shall have to be made good/repaired/replaced as per the original standards/specification of the department, by the Agency at his own cost and nothing extra shall be paid by the department.

- In case of faults/repairs/damages, the Agency should immediately submit a detailed fault analysis report, citing details of the repair/rectification schedule with details of probable completion which will be executed after due approval of PIC (CIF).
- On completion of the replacement of spares before the commission of the system, the replacement shall be physically checked and properly tested. These checks and tests shall be conducted by the agency under the supervision of PMEC Berhampur and the agency shall furnish the final test result.

Annexure- I
Information Sheet of the bidders

Sl. No.	Description	To be filled-in by the supplier
1	Bidder is an OEM or Authorized system Integrator	OEM or Authorized system Integrator
2	Name with Full Postal Address, phone No./e-mail of bidder	
3.	(i) If the Bidder is an OEM, he has to submit a copy of the Industry Registration and Tax Registration Certificate issued from the competent authority. (ii) If the bidder is an Authorized system Integrator, he has to submit OEM's authorization letter (MAF), in original, on the OEM's letter head duly signed by authorized signatory.	
4	Contact Person (s) details with Phone No/Mobile No authorized during the tender Opening	
5	Details of Service Centre/Contact Person a) Full Postal Address of Service Centre in Bhubaneswar/ Berhampur Only b) Full Postal Address of Contact Person with phone No./FAX/e-mail	
6	Copies of IT return of last three years	
7	Copy of balance sheet of last three years duly audited and certified by Chartered Accountant.	
8	Copy of annual turnover statement certified by a CA.	
9	PAN No & TIN No of the OEM/ Authorized Dealer (Attach copy)	
10	Odisha GST registration details and up-to date filed return (Attach copy)	
11	BIS and ISO certification	
12	Details of DD towards the cost of tender documents Issuing Bank: Branch Name: Branch Code: DD No: Date of Issue: Payable at: Date of Expiry:	
13	Details of DD towards EMD Issuing Bank: Branch Name: Branch Code: DD No: Date of Issue: Payable at: Date of Expiry:	
14	Undertaking to provide all after-sales support	

DECLARATION: We hereby certify that the information furnished above is full and correct to the best of our knowledge. We understand that in case any deviation is found in the above statement at any stage, the tender is liable to be rejected.

Annexure - II
Undertaking by the Bidder for unconditional acceptance of terms & Conditions

To
The Principal,
Parala Maharaja Engineering College,
Sitalapali, Berhampur, Ganjam-761003

Subject: Tender documents for Supply, Installation, Testing and Commissioning of IP-based Digital CCTV, Wifi and LAN system at PMEC, Berhampur

Dear Sir,

We have carefully examined and gone through the full content of the tender documents and have visited the installation site of the works and have acquired the requisite information affecting the tender. We hereby offer to quote and execute the works by the guidelines, terms and conditions laid down in the tender documents and accept **unconditionally** all the terms and conditions laid down in the tender call documents published on the website.

We warrant that the goods to be supplied under this contract as per the complete technical specifications laid in the tender call notice are new, unused, of the most recent or current models, and incorporate all recent improvements in design and materials and all the services configured shall trouble-free function. In case of non-observance of any of the guidelines, terms and conditions mentioned in this tender document by us, we understand that our tender/purchase order (as the case) may be cancelled.

We further undertake that none of the Proprietor/Partners/Directors of the Agency/agency was or is Proprietor or Partner or Director of any Agency with whom the Government have banned /suspended business dealings. I/We further undertake to report to you immediately after we are informed but in any case not later than 15 days, if any Agency in which Proprietor/Partners/Directors are Proprietor or Partner or Director of such an Agency which is banned/suspended in future during the currency of the Contract with you.

The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / we, am / are 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.

We understand that you reserve the right to accept or reject any or all the tender either in full or in part without assigning any reason thereof.

We hereby agree to supply, install, test and commission IP based CCTV, Wifi, LAN systems abiding by all terms and conditions of the tender document if we are offered to execute the contract and in default thereof, to forfeit and pay to you such sums of money as are stipulated in the conditions contained in the tender together with the written acceptance of the contract.

Full Signature of Bidder

Place:

Date:

Annexure-III
List of clients

S N	Details	Details of Client (1)	Details of Client (2)	Details of Client (3)
1	Project name, location and address			
2	Name, Address and telephone numbers			
3	Brief description of the work			
4	Contract No. /copy of work order (Enclose copy)			
5	Value of Contract as completed (Rs. in Lakhs)/Payment Certificate			
6	Date of issue of work order			
7	Stipulated period of completion			
8	Actual date of completion of work			
9	Work Completion Certificate			

Note: Please fill this form and submit the supporting documents for each customer reference. Failing the same may lead to the rejection of the Tender. You may add the customer references by adding multiple rows.

Annexure-IV

Specification of CCTV, Wi-Fi and LAN systems

The specification mentioned here is the minimum, any better specification will also be accepted. A list of some known/approved makes for complete system as given below is indicative.

List of Approved Makes

Sl. No	Description of item
1	Camera & NVR: Sony/Panasonic/Tyco/Prama/Axis/ Boach/Honeywell/CPplus or equivalent make of repute
2	Access point, Switch & Modules: Cisco/Netgear/Juniper /HP/Aruba/D-Link or equivalent make of repute
3	Passive component: Commscope/Siemon/Panduit/Belden/D-Link or equivalent make of repute
4	TV: LG/Sony/Samsung/Panasonic or equivalent make of repute
5	UPS: Vertiv/APC/Numeric/EATON/Emerson or equivalent make of repute
6	Rack: Valrack/Netrack/Schneider/APW/D-Link or equivalent make of repute
7	PVC Pipe: AKG / Polycab/Finolex/Precision/Sudhakar or equivalent make of repute
8	Electrical Socket/Switch/box: Legrand/Schneider/Anchor Roma or equivalent make of repute
09	Electrical Cable: Finolex/Havells/V-Guard or equivalent make of repute
10	Battery: Exide/Amron (Amara raja)/Cummins or equivalent make of repute
11	Hard drive: WD/Seagate/Toshiba or equivalent make of repute
12	Access Point: Cisco/Netgear/Juniper/HP/Aruba/D-Link or equivalent make of repute
13	Other Item TO BE DECIDED BY TECHNICAL COMMITTEE/PIC-IN - CHARGE

Please note that the active and passive components should be of the same make. The bidder should mention the make, model and technical specification of each item to be supplied in the technical bid. Bidder quoted for substandard products will not be considered and the offered quotations are liable for rejection.

General Conditions apply to OEM for the items as specified in BOQ 1 and BOQ 2		
Sl. #	Eligibility Criteria	Compliance (Yes/No) with Document
1	All systems and components must be in compliance with CE/FCC/UL/BIS certifications. Model-wise, series-wise details should be available on the BIS website.	
2	In case the OEM is not participating directly, bidder should be an authorized reseller or channel partner of the OEM. An authorization letter from the OEM needs to be submitted in original. The authorization letter should clearly specify the warranty terms of the products supplied.	
3	OEM should have own online-dedicated CCTV support center available during working hours and a fully equipped repair and maintenance office in India. Full disclosure should be made to ensure that the OEM can be contacted in case there are any requirements in future.	
4	The BIS certificate should be in the name of the quoted OEM. The CCTV OEM should have its own Factory in India.	
5	The CCTV OEM should not have been detected with any vulnerability before tender submission by STQC in any of its earlier projects. The OEM should give the same undertaking on their letterhead that they have never been rejected by STQC.	
6	The OEM should offer ISO 9001:2015, ISO 14001:2015, ISO 27001:2013, ISO 45000:2018 for their manufacturing process.	
7	The OEM should have CMMI level 5 certification to validate its performance across a range of critical business capabilities, including product development, service excellence, workforce management, data management, supplier management, and cyber security.	
8	The quoted CCTV OEM should be a Full member of ONVIF. For verification purposes, all the relevant details should be available on the ONVIF website. The OEM should give a declaration about its full membership.	
9	The MAC address of the cameras must be registered in the name of OEM. If the MAC address does not match, it means that the device is not created by the original manufacturer, it's only an assembling or a labeling which has been done, and such party shall be immediately rejected.	
10	The camera OEM should be a genuine manufacturer and should comply with HEVC H.265 and be listed on HEVC website on bid submission date.	
11	The OEM should have their CCTV camera and VMS software complied with ONVIF protocol and OEM should be listed in ONVIF website.	
12	Malicious code Undertaking letter from OEM.	
13	OEM BRAND Should have its trade mark registration under Govt. of India	

14	OEM must be certified that the proposed model of CCTV product must not become obsolete/End of Life within a period of 5 years. If it gets EOL due to technology advancement then OEM will support with Equivalent or Higher model. The product which is nearing to the end of sales must not be proposed in the solution.	
15	OEM should have supplied a minimum of 150000 cameras till the tender submission date. CA certificate should be provided.	
16	If the Hard disc crashes then Hard disc OEM should recover the data with replacement of Hard disc in warranty period.	
17	Quoted products should be registered with their own MAC ID in the name of the OEM.	
18	OEM should have crossed 3 crores annual turnover as of 31 Mar 2024 with positive net worth.	
19	OEM should have an employee strength of over 200 pan India.	
20	CCTV OEM should not have Hi Silicon chips in their camera for data security and same undertaking need to be provided.	
21	Camera & NVR should be from same OEM for smooth integration.	
22	Products quoted should support MII initiative	
23	OEM should not be banned by any organization in India	
24	The product datasheet of each item must be available on the OEM website for technical verification. Technical Specifications Compliance Certificate from CCTV OEM need to be submitted along with technical bids in OEM Letterhead.	
25	OEM should provide a land border certificate	

A. SPECIFICATION FOR IP CCTV CAMERAS & NVR

BOQ 1: 4MP Fixed Dome Camera				
Sl. #	Parameters	Specification	Compliance Yes / No	Remarks
1	Image Sensor	1/2 .8 inch Progressive Scan CMOS		
2	Max. Resolution	2688 (H) × 1520 (V)		
3	Shutter Time	Auto/Manual 1/3 s–1/100,000 s		
4	Min. Illumination	0.001 lux@F1.4 (Color, 30 IRE), 0.001 lux@F1.4 (B/W, 30 IRE), 0 lux (IR on)		
5	Lens Type	Fixed 3.6mm fixed Lens		
6	Iris Type	Fixed		
7	IR Range	IR Range of 30 Mtr., Warm Light Range of 30 Mtr. Or better .		
8	Main Stream	Main stream: 4MP (2688 × 1520)@1-25/30fps/ (2560 × 1440)@1-25/30 Sub stream 1: 720p (1280 × 720), D1 (704 × 576)@1–25 fps/ (704 × 480)@1–30 fps, VGA(640 × 480)@1-30fps, CIF (352 × 240)@1-30fps/ (352 × 288)@1-25fps Sub stream 2: D1 (704 ×		

		576)@1-25 fps/ (704 × 480)@1-30 fps, VGA(640 × 480)@1-30fps, CIF (352 × 240)@1-30fps/ (352 × 288) @1-25fps		
11	Video Compression	H.265+/H.265/H.264+/H.264		
12	Microphone	Support Built-in Mic, Built-in speaker		
13	Environment Noise Filtering	Yes		
14	Audio Compression	G.711a, G.711Mu, PCM, G.726, AAC		
15	Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
16	User/ Host	6 (Total bandwidth: 48 M)		
17	Protocols	FTP, IPv6, IPv4, DNS,RTCP, NTP, RTP, HTTP, HTTPS, SNMP V3, TLS Version 1.2, TCP/IP, PPPoE, NFS, UDP, ICMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), unicast, multicast.		
18	Alarm Event	Network disconnection, IP conflict, illegal access, Motion detection, Video tampering, Audio detection, SMD (human & Motor Vehicle), Security exception		
19	Wide Dynamic Range(WDR)	120 dB		
20	RAM/Rom	128MB		
21	Day/Night Switch	Day, Night, Auto, Schedule		
22	Image Enhancement	BLC, HLC, 3D DNR		
23	Privacy Mask	4 programmable polygon privacy masks		
24	Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port		
25	DORI Distance	Lens 3.6mm: 78.0 m (Detect), 31.2 m (Observe), 15.6 m (Recognize), 7.8 m (Identify)		
26	Reset Key	Yes		
28	Mirror Function	Support		
29	SDK and API	Support		
30	Power	12 VDC ± 25%, PoE: IEEE 802.3af		

31	Start-up and Operating Conditions	-40°C to +60°C (-40°F to +140°F)		
32	Protection	IP67		
33	Warranty	60 Months		
BOQ 2: 128 Channel Network Video Recorder (NVR) with 08-HDD slot				
SI #	Parameters	Specification	Compliance Yes / No	Remarks
1	IP Video Input	128-ch		
2	Incoming Bandwidth	512 Mbps		
4	HDMI 1 Output	Supported		
5	HDMI 2 Output	Supported		
6	VGA 1 Output	Supported		
7	VGA 2 Output	Supported		
8	Video Output Mode	HDMI 1 and VGA 1 provide simultaneous video output, and work as the main output; HDMI 2 and VGA 2 provide simultaneous video output, and work as the auxiliary output		
9	Audio Output	2-ch, RCA (Linear, 1 K Ω)		
10	Two-Way Audio	1-ch, RCA (2.0 Vp-p, 1 K Ω , using the audio input)		
11	Decoding Format	H.265+/H.265/H.264+/H.264		
12	Recording Resolution	32MP, 24MP, 16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 2MP, 960p, 720p, D1, CIF, QCIF		
13	Synchronous playback	16-ch		
14	Decoding Capability	AI disabled: 2 channel 32 MP@30fps, 2 channel 24 MP@30 fps, 4 channel 16 MP@30 fps, 5 channel 12 MP@30 fps, 8 channel 8 MP@30 fps, 10 channel 6 MP@30 fps, 12 channel 5 MP@30 fps, 16 channel 4 MP@30 fps, 32 channel 1080p@30 fps, 64 channel 720p@30 fps AI enabled: 1 channel 32 MP@30 fps, 1 channel 24 MP@30 fps, 2 channel 16 MP@30 fps, 4 channel 12 MP@30 fps, 6 channel 8 MP@30 fps, 8 channel 6 MP@30 fps, 8 channel 5 MP@30 fps, 12		

		channel 4 MP@30 fps, 24 channel 1080p@30 fps, 48 channel 720p@30 fps, 64 channel D1 @30 fps		
15	Audio Compression	G.711a, G.711u, PCM, G726		
16	Network Protocol	HTTP, HTTPS, TCP/IP, IPv4, IPv6, UDP, NTP, DHCP, DNS, SMTP, UPnP, IP Filter, FTP, DDNS, SNMP, Alarm Server, InstaOn, Auto Registration, ISCSI, ONVIF 23.06(Profile T; Profile S; Profile G), CGI, SDK.		
17	Network Interface	2 (10/100/1000 Mbps Ethernet port, RJ-45)		
18	RAID Type	RAID 0/1/5/6/10		
19	Serial Interface	4 USB (2 front USB 2.0 ports, 2 rear USB 3.0 ports), 2 HDMI, 2 VGA, 2 RS485 (1 port for half duplex serial communication, 1 port for full-duplex serial communication), 1 RS232, 1 eSATA		
20	SATA	08 SATA interfaces		
21	eSATA	1 eSATA interface		
22	Capacity	Up to 20 TB capacity for each disk		
23	Alarm In/Out	16/8		
24	USB Interface	Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0		
25	Power Supply	100–240 VAC, 50/60 Hz		
26	Consumption	≤ 50 W (without HDD)		
27	Working Temperature	-10 °C to 55 °C (14 °F to 131 °F)		
28	Working Humidity	10% to 90%		
31	Warranty	60 Months		

General Conditions applicable to OEM/ Bidders for the items as specified in BOQ 3 TO BOQ 26

Sl. #	Eligibility Criteria	Compliance (Yes/No) with Document
1	Warranty declaration in OEM letterhead mentioning the product Model No.	
2	Bid Specific Authorization in OEM letter head.	
3	Bid Specific Malicious code certificate.	
4	Product's features must be mentioned in the OEM Data sheet and must be available in OEM global site.	
5	All Active, Passive & Rack Components like switch, DAC Cable, SFP Module should be from Single OEM	

5	OEM should be ISO-9001, ISO-14001, ISO-45001 certified	
3	OEM should have IEC-62443-4-1 certification.	
4	OEM should be present in India for minimum 10 years. Certificate of Incorporation to be submitted.	
5	OEM average annual turnover should be min 3 Crores during last 3 years.	
6	OEM should have TOLL FREE support number. Escalation matrix to be submitted with the bid.	
7	OEM Should have local presence in Odisha, recent Telephone bill / Electric bill / Trade license/ agreement copy etc. Documents should be attached.	
8	OEM should have direct or authorized service center in Odisha, Documents should be attached. (In OEM's Letterhead)	
9	OEM should provide land boarder certificate	

B. SPECIFICATION FOR ACTIVE & PASSIVE MATERIALS

BoQ 3: 24 Port UTP Patch Panel (Fully Loaded)			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	24-Port Cat6 UTP Patch Panel		
2	Patch Panel made of powder-coated steel, in 24 port configurations.		
3	Allow for a minimum of 200 re-terminations without signal degradation below the standard compliance limit.		
4	Have port identification numbers on the front of the panel.		
5	Should have self-adhesive, clear label holders (transparent plastic window type) and white designation labels with the panel		
6	IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch-down tools		
7	The Cat-6 transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard		
8	Mechanical Characteristics:		
9	Plastic Housing: PBT + Glass Fiber, UL94V-0 rated		
10	Jack Connector		
11	Operating Life: Minimum 750 insertion cycles		
12	Material: Phosher bronze with nickel plated		
13	Contact Plating: 50μ" Gold plated on plug contact area		
14	IDC Connector		
15	Plastic Housing: Polycarbonate		
16	IDC Contact Plating: Phosphor bronze with tin plated		
17	Wire Accommodation: 22-26 AWG solid		
18	Contact resistance: 20Milliohms		
19	Insulation resistance: 100 Mega Ohms @ 500V DC		

BoQ 4: 48 Port UTP Patch Panel (Fully Loaded)			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	48-Port Cat6 UTP Patch Panel		
2	Patch Panel made of powder-coated steel, in 48 port configurations.		
3	Allow for a minimum of 200 re-terminations without signal degradation below the standard compliance limit.		
4	Have port identification numbers on the front of the panel.		
5	Should have self-adhesive, clear label holders (transparent plastic window type) and white designation labels with the panel		
6	IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch-down tools		
7	The Cat-6 transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard		
8	Mechanical Characteristics:		
9	Plastic Housing: PBT + Glass Fiber, UL94V-0 rated		
10	Jack Connector		
11	Operating Life: Minimum 750 insertion cycles		
12	Material: Phosher bronze with nickel plated		
13	Contact Plating: 50μ" Gold plated on plug contact area		
14	IDC Connector		
15	Plastic Housing: Polycarbonate		
16	IDC Contact Plating: Phosphor bronze with tin plated		
17	Wire Accommodation: 22-26 AWG solid		
18	Contact resistance: 20Milliohms		
19	Insulation resistance: 100 Mega Ohms @ 500V DC		
BoQ 5: Cat – 6 UTP Patch Cord - 1 Mtr (RED, YELLOW, BLUE)			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Category 6 UTP Patch Cord – 1Mtr		
2	The work area equipment cords shall, at a minimum comply with proposed ANSI/TIA/EIA-568-C.2 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair Category 6 Cabling.		
3	Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.		
4	Mechanical Feature of Cable:		
5	Conductor size: 24 AWG multi-strands bare copper		
6	Jacket: FR-PVC		
7	Mechanical Feature of Plug:		
8	Operating life: Minimum 750 insertion cycles		
9	Contact blade: Copper Alloy		

10	Operating temperature: -10°C to 60°C		
11	RJ45 Plug & Boot Material: Clear Polycarbonate for RJ-45 And PVC for Boot		
12	Factory Crimped Patch Cord with Factory Moulded Boot		

BoQ 6: CAT6 UTP Cable (RED, YELLOW, BLUE)

Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-C.2 channel performance		
2	The 4 pair Unshielded Twisted Pair cable shall be UL Listed, ETL Verified		
3	All Category 6 cables shall meet or exceed the following characteristics:		
4	Mechanical Characteristics		
5	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, full separator. Half shall not be accepted.		
6	Conductor dia: 23 AWG		
7	Insulation: polyethylene		
8	Pairing: Two insulated conductor twisted together		
9	No. of Pair: 4 pair twisted together		
10	Color of sheath: FR-PVC GREY- Single sheath		
11	Rip Cord should be available		
12	Sequential meter marking should be available		
13	Temperature Rating: (- 20 to +60 C)		
14	Packing : 305 Mtrs.		
15	Low Frequency Electrical Parameter		
16	Conductor Resistance (DC): 9.38 OHMS/100 MTR @20 Degree C. MAX.		
17	Resistance Unbalance: 5% Max		
18	Mutual Capacitance: 5.6 nF/100 mtrs Max.		
19	Capacitance Unbalance pair/ground: 330PF/100M MAX		
20	Nominal Velocity of Propagation: 69%		
21	Impedance: 100±15% OHMS		
22	Worst Case cable skew: 45ns/100m		
23	Generally confirming to EIA/TIA 568-C.2 and IEC/ISO 11801		

BoQ 7: UTP Information Outlet, BACK BOX, FACE PLATE

Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Single Port Cat6 UTP Information Outlet with Surface Mount Box		
2	Single Port		
3	Write on labels in transparent plastic window – supplied with plate		

4	Face Plate with shutter		
5	Should be able to support variety of jacks – UTP, STP etc.		
6	Category 6, TIA568 C.2		
7	All information outlets for 22-26 AWG copper cable shall:		
8	Use insulation displacement connectors (IDC)		
9	Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limits.		
	Jack Specification:		
10	Plastic Housing: Polycarbonate, UL94V-2 rated or equivalent		
11	Operating Life: Minimum 750 insertion cycles		
12	Contact Material: Phosphor Bronze with nickel plated		
13	Contact Plating: 50 μinches gold on plug contact area		
14	IDC : Housing PC , UL 94 V-2, 568A/B configuration		
15	Operating Life: Minimum 200 Re-terminations		
16	IDC Contact Plating: Phosphor bronze with tin plated		
17	Operation Temp: -10 C to 60 C		
18	Keystone (RED, YELLOW BLUE) of I/O should be UL Listed. Back box should be of same make as keystone jack & face plate.		
BoQ 8: 12 Port Loaded LIU			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	12-Port, 19" Rack Mount LIU Fully Loaded with Single Mode SC Adapters		
2	Aluminium/Steel base material with powder coating for light mounting		
3	Snap-in locker design, easy to change the adapter panels		
4	Front mounted cable saddles for jumper management		
5	It should have facility for managing splices & terminations		
6	It should have rubber fiber slotted bracket built-in		
7	It should be capable of storing up to 3mtr of 900micron tight buffered fiber per adapter		
8	It should have snap-in locker design for easy to change adapter panels for various connector patching		
9	It should have removable rubber grommet allowing for pre-terminated fiber trunk installation, cable protection & minimizing dust build-up.		
10	It should have at least 4 rubber cable plugs for cable entries.		
11	It should have removable front & top covers for better access to interior of LIU		

12	It should be supplied with cable ties, mounting ear screws and spiral wrap tubes		
BoQ 9: SC Single Mode Fiber Pigtail			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Single Mode SC Pigtail - 1Mtr		
2	Provide a field installable Single mode SC pigtails		
3	Utilize a UPC polishing on the tip to provide high yield during installation.		
4	Meet TIA/EIA 568.C.3 standards for repeatability.		
5	Insertion Loss (Max): <0.3 db Max.		
6	Mating Cycle: 1000 Times		
7	Return Loss: >= 50 db for UPC		
8	Connector ferrule: Ceramic		
9	retention strength: 20N		
10	Operating Temp.: (- 20 deg. C to + 60 deg. C)		
11	Buffer diameter: 900um Tight buffer		
12	Types: SC Type Simplex		
BoQ 10: SC-LC SM Duplex OFC Patch Cord			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Single Mode SC-LC Duplex Patch Cord - 3Mtr		
2	Optical fiber patch leads shall comprise of Single mode 9/125µm fiber with SC-SC fiber connectors terminated at each end. The optical fiber patch leads shall comply with the following specifications:		
3	Optical Fiber – Single mode		
4	Connector: Zirconia ceramic ferrule		
5	Pre-radiuses and pre-polished ferrule		
6	Duplex Type		
7	Color-coded yellow for Single mode		
8	Insertion Loss : <0.3 db		
9	Cable: 9/125, SM		
10	Return Loss: >= 50dB for UPC		
11	Durability: 1000 mating cycle		
12	Working Temp: (- 20 deg. C to + 60 deg. C)		
13	Length: 3 Meter		
BoQ 11: 1G Single mode Transceiver			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	1000Base-LX Single Mode SFP Transceiver with Duplex LC Connector		
2	Support IEEE802.3z 1000BASE-LX		
3	At least 10Km distance support on single mode fiber interface		
4	Output TX Optical Power MAX.: -3dBm MIN.: -8 dBm		

5	Output RX Optical Power MAX.: -3dBm MIN.: - 24 dBm		
6	Sensitivity – 24 dBm		
7	Cable Type single-mode 9/125um fiber		
8	Operating wavelength: 1310nm		
9	Should be same make as switches.		
BOQ 12:PVC flexible			
1	Diameter:25mm		
2	Colour: White		
3	Length: 25 mtr		
4	Material: PVC		
BOQ 13:PVC Casing Caping			
1	Width:25mm		
2	Colour: White		
3	Length: 2 mtr		
4	Material: PVC		
BOQ 14:Camera mounting Box			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Material : PVC		
2	Usage/Application : Junction Boxes		
3	Shape : Square		
4	Dimension : 4×4 Inch		
5	Mounting Type : Surface Mounting		
BOQ 15: 55” Smart TV Display			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Display Size 55inch		
2	Resolution: 3840X2160(UHD)		
3	Backlight Unit Type: Direct		
4	Brightness: 400		
5	Dynamic Contrast Ratio (Dynamic MCI(Hz)): 1,000,000:1		
6	Static(Panel)Contrast Ratio: 1300:1		
7	Refresh Rate : 60Hz		
8	Video : Yes		
9	HDR(10Pro/HLG): Yes		
10	Speaker(sound output): 10W+10W		
11	Digital (Terrestrial, Cable, Satellite): DVB-T2/C		
12	Hospitality Feature: Hotel Mode/PDM/Installer Menu, One Channel Map, IP, Channel Manager; External Speaker out (Int Variable/Fixed, 3.5mm, Stereo, Single-ended Type (GND, L+, R+), 2W+2W with 80)		
13	Smart Feature : web OS version (web OS 6.0), Smart Home (Launcher Bar), Web Browser Pre-loaded App (YouTube only), SDP Server compatibility, Mood		

	Display, Soft AP, Wi-Fi (Version) (802.11ac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2)		
15	Signage Feature: Vertical Setup, Fail over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility, Crestron Connected (Network Based Control), DPM (Digital Power Management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager)		
16	SUPERSIGNSWCOMPABILITY: Control/Control Plus, CMS (Premium), Simple Editor.		
	Input Interface:		
17	Set Side : HDMI In (3(2.0)), Head phone Out (Phone Jack Type), RS-232C(D-Sub9pin/ Phone jack) (Phone Jack,4pi)		
	Jack Interface:		
18	Set Rear : USB(2.0), RF In ,Digital Audio Out (Optical), External Speaker Out (3.5mmphonejack), RJ45 (Usage Purpose)(LAN)		
	Power:		
19	Power Supply: (Voltage, Hz)AC120V-,50/60Hz		
20	Power Consumption(Max); 166.3		
21	Power Consumption(Type): 140.1		
	Mechanic:		
22	Standby Power Consumption: Under0.5W		
23	Required Listing (Certification)		
24	Safety : CB,CUTR		
25	EMC : CE		
	Accessories:		
26	Remote type: S-con		
27	Power Cable: Detached (1.5m,StraightType)		
28	Warranty : 5years (60 Months)		
	DIMENSION (UNIT: mm kg):		
29	VESA Compatible: 300x300		
30	Weight without Stand: 14		
31	Weight with Stand: 14.2		
32	Weight in Shipping: 19		
33	Size without Stand: 1235x715x57.5		
34	Size with Stand: 1235x772x232		
35	Size in Shipping: 1360x810x162		
36	Bezel Width (L/R/U/B): 0n Bezel: 12.8/12.8/12.8/19.9		
BOQ 16:Hard disk 10TB surveillance HDD			

Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Capacity : 10TB		
2	Form Factor : 3.5-Inch		
3	Connector : SATA		
4	Transfer Rate : upto180MB/s		
5	Recording Technology : CMR		
6	Cache Size : 256MB		
7	Weight : 450gms		
8	Operating Temperature 0°C to 65°C		
9	Non-Operating Temperature : -40°C to 70°C		
10	Certifications : BSMI,ICES-003/NMB-003,CE,FCC,KC,Maghreb,RCM,UKCA,VCCI,CB-Scheme, TUV,UL		
11	Warranty: shall be at least 2 years or manufacturer warranty period, whichever is higher from the date of Installation		

BOQ 17:1 KVA OFFLINE UPS

Sl. #	Specification	Compliance (Yes/No)	Remarks
1	General Features		
1.1	Nominal power (VA)	1000VA	
1.2	Active power (W)	600W	
1.3	Technology	Line Interactive	
1.5	Waveform	Modified Sinusoidal at Backup mode	
1.6	UPS architecture	Tower	
2	Input		
2.1	Input voltage	230 V	
2.2	Input frequency	50Hz \pm 6% Autosensing	
2.3	Input Voltage Range	140V-300V on full load	
3	Output		
3.1	Output voltage	230V \pm 10%	
3.2	Output frequency (nominal)	50Hz \pm 1%	
4	Mechanical features		
4.1	Measurements W×D×H (mm)	150x350x160	
4.2	Net Weight (kg)	8	
5	Environmental conditions		
5.1	Operating temperature(°C)	0 - 40 °C	
5.2	Degree of protection	IP20	
5.3	Relative humidity (%)	0 - 95% non-condensing	
5.4	Noise level at 1 m (dBA)	< 45	
6	Warranty	2 years or manufacturer warranty period whichever is higher, from the date of Installation	

BOQ 18: Wi-Fi 6 Indoor Access Point			
Sl.#	Specification	Compliance (Yes/No)	Remarks
1	Please mention Make, Model No		
2	Device Interfaces 1 x RJ45 console port, 1 x 10/100/1000 Ethernet (PoE) LAN, factory reset, power input		
3	Access Point should have One RJ45 Console port		
4	Access Point should have 2 x 2 dual-band internal antennas		
5	Access Point should support Antenna Gain 3.2 dBi (2.4 GHz), 4.3 dBi (5 GHz)		
6	Access Point should support Maximum Output Power 23 dBm (2.4 GHz), 26 dBm (5 GHz)		
7	Access Point should support Maximum Data Signal Rate Up to 1800 Mbps		
8	Access Point should support Standards IEEE 802.11a/b/g/n/ac/ax, IEEE 802.3u/ab, IEEE 802.3az Energy-Efficient Ethernet (EEE), IEEE 802.3at PoE		
9	Access Point should support Operating Frequency 2.4 - 2.483 GHz, 5.15 - 5.35 GHz, 5.47 - 5.85 GHz		
10	Access Point should support Security Protocol WPA/WPA2/WPA3™ Personal/Enterprise, WEP 64/128-bit, SSID broadcast disable, MAC address access control, internal RADIUS server		
11	Access Point should Support for Power of Ethernet 802.3at		
12	Access Point should Support MU-MIMO slices through congestion, reducing wait time for all users		
13	Access Point should Support latest WPA3™ Personal & Enterprise wireless encryption		
14	Access Point should support multiple AP modes to ensure performance optimization based on your network's needs AP/WDS with AP/WDS		
15	Access Point should support MAC Address Filtering and WLAN Partitioning ensure ultimate control of your network's access		
16	Access Point should support Power Supply 12 V / 2.5 A (optional power adapter), IEEE 802.3at PoE		
17	Access Point should support Maximum Power Consumption 14.7 W by ADP, 16 W by PoE		
18	Access Point should support Operating Temperature 0 °C to 40 °C (32 °F to 104 °F)		
19	Access Point should support Storage Temperature -20°C to 65 °C (-4 °F to 149°F)		
20	Access Point should support Certifications CE, FCC		
BOQ 19: Giga PoE 8 Port Layer 2 with 2 SFP Switch			
Sl. #	Specification	Compliance (Yes/No)	Remarks
1	Switch with 8 nos 10/100/1000 Mbps PoE Port and 2 nos 100/1000 Mbps SFP ports		
2	SFP's 1000 BaseSX,1000BaseLX,1000BaseTX		

3	The Switch shall have Non-blocking wire speed switch fabric		
4	The Switch shall have Min. 20 Gbps Back plane or higher		
5	The Switch shall have Min 14 million pps or higher		
6	The Switch shall support Min. 8K Mac address		
7	The Switch Should support Jumbo Frame (9K Bytes)		
8	The witch Should Support PoE Capable Port 1 to 8		
9	The Switch Should Support PoE power Budget of 130 watt		
11	The Switch should have IGMP Snooping v1,v2 & IGMP v3 awareness		
12	The Switch should have Spanning tree 802.1D STP, 802.1W RSTP & 802.1s MSTP		
13	The Switch should have 802.3ad Link Aggregation Up to 8 groups/8 ports per group		
14	The Switch should have Port Mirroring One to one/Many to One		
15	The switch should support 4 nos IP interface		
16	The switch should support 124 nos IPv4 static route & 50 nos IPv6 static route		
17	The LAN switch shall have IEEE 802.1Q VLAN encapsulation. Up to 255 VLANs per switch.		
18	It shall have Auto Surveillance VLAN, Asymmetric VLAN & Auto Voice VLAN		
19	It shall support 802.1p Priority Queues (8 queues per port)		
20	Queue Handling mode: WRR & Strict Mode, Class of service shall be based on DSCP,802.1p queues,IPv6 Traffic class		
21	The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security, providing user authentication, DHCP Server Screening.		
22	It shall support Network Timing Protocol (NTP/SNTP) to provide an accurate and consistent timestamp to all intranet switches.		
23	It should support Compact CLI through Telnet, SNMPv1/V2c and V3, LLDP, LLDP-MED.		
24	Switch should be CE,FCC,UL,VCCI, certified		
25	Switch should be IPv6 ready from day one.		

BOQ 20: 24-port PoE access switch with 2 nos 1G/10G SFP Ports

Sl.#	Specification	Compliance (Yes/No)	Remarks
1	Layer-2 Managed Switch having minimum 24x 10/100/1000BaseT PoE ports & 4x 1/10G SFP+ slots		
2	Switching Capacity: Minimum 128Gbps (Must have non-blocking architecture) Packet Forwarding Rate (For 64-bytes packet size): Minimum 95Mpps		
3	The switch should support both IEEE 802.3af & IEEE 802.3at standards. It should have PoE power budget of atleast 370Watt.		

4	The Switch should support 6KV Surge Protection.		
5	The Switch should have following L2 features:		
6	MAC Address Table size: Atleast 16000, support atleast 256 static MAC		
7	Flow Control: IEEE 802.3x in full duplex, back pressure in half duplex & HoL blocking prevention		
8	Jumbo Frame Support (Atleast 12000 bytes)		
9	IGMP v1 v2 with atleast 256 IGMP snooping groups, Per VLAN IGMP Snooping, port based IGMP snooping fast leave.		
11	LLDP, LLDP-MED, IPv6 Neighbor Discovery.		
12	IEEE802.1D STP, 802.1w RSTP, 802.1s MSTP, Root guard or equivalent feature.		
13	The switch should be able to avoid the loop occurring in a single port connected to an unmanaged switch/hub by shutting down the corresponding port or corresponding VLAN		
14	IEEE 802.3ad Link Aggregation with atleast 8 ports per groups & 8 groups per switch.		
15	Port mirroring for Tx/Rx/Both. One-to-One mode, Many-to-one mode		
16	IEEE 802.1Q VLAN, atleast 4094 Static VLANs, Voice-VLAN		
17	The switch should have 802.1p support with 8 queues per port. Support strict & WRR queue handling technique.		
18	The switch should have Port-based ingress & egress bandwidth control with minimum granularity of atleast 16kbps		
19	The switch should have standard & extended Access control list		
20	The switch should have the following security features: Broadcast, Multicast & Unicast storm control, port security feature with atleast 64 MAC per port, traffic segmentation, ARP spoofing prevention, IEEE 802.1x, DHCP server screening, RADIUS server.		
21	The switch should have feature to protect the CPU from protocol control packet attack.		
22	The switch should have cable diagnostic feature to check the status of connected RJ45 cables.		
23	The Switch should have following Management features from day-1: Web-based GUI, Web based GUI for IPv6, Physical console port for Out of band CLI management, Telnet Server, Telnet Server IPv6, TFTP Client, TFTP client IPv6, SNMPv1v2cv3, SNMP IPv6, SNMP trap, BootP/DHCP Client, SNTP, trusted host, trusted host IPv6, RMONv1, Syslog, Syslog IPv6.		
24	The switch should have Energy-saving green technology based on cable length & link status. IEEE 802.3az		
25	All type of switches & transceivers should be from same		

	make.		
BOQ 21: 24-port Non-PoE access switch with 2 nos 1G/10G SFP Ports			
Sl.#	Specification	Compliance (Yes/No)	Remarks
1	Layer-2 Managed Switch having minimum 24x 10/100/1000BaseT non PoE ports & 4x 1/10G SFP+ slots		
2	Switching Capacity: Minimum 128Gbps (Must have non-blocking architecture) Packet Forwarding Rate (For 64-bytes packet size): Minimum 95Mpps		
3	The switch should support both IEEE 802.3af & IEEE 802.3at standards. It should have PoE power budget of at least 370Watt.		
4	The Switch should support 6KV Surge Protection.		
5	The Switch should have following L2 features:		
6	MAC Address Table size: At least 16000, support at least 256 static MAC		
7	Flow Control: IEEE 802.3x in full duplex, back pressure in half duplex & HoL blocking prevention		
8	Jumbo Frame Support (At least 12000 bytes)		
9	IGMP v1 v2 with at least 256 IGMP snooping groups, Per VLAN IGMP Snooping, port based IGMP snooping fast leave.		
11	LLDP, LLDP-MED, IPv6 Neighbor Discovery.		
12	IEEE802.1D STP, 802.1w RSTP, 802.1s MSTP, Root guard or equivalent feature.		
13	The switch should be able to avoid the loop occurring in a single port connected to an unmanaged switch/hub by shutting down the corresponding port or corresponding VLAN		
14	IEEE 802.3ad Link Aggregation with at least 8 ports per groups & 8 groups per switch.		
15	Port mirroring for Tx/Rx/Both. One-to-One mode, Many-to-one mode		
16	IEEE 802.1Q VLAN, at least 4094 Static VLANs, Voice-VLAN		
17	The switch should have 802.1p support with 8 queues per port. Support strict & WRR queue handling technique.		
18	The switch should have Port-based ingress & egress bandwidth control with minimum granularity of at least 16kbps		
19	The switch should have standard & extended Access control list		
20	The switch should have the following security features: Broadcast, Multicast & Unicast storm control, port security feature with at least 64 MAC per port, traffic segmentation, ARP spoofing prevention, IEEE 802.1x, DHCP server screening, RADIUS server.		
21	The switch should have feature to protect the CPU from		

	protocol control packet attack.		
22	The switch should have cable diagnostic feature to check the status of connected RJ45 cables.		
23	The Switch should have following Management features from day-1: Web-based GUI, Web based GUI for IPv6, Physical console port for Out of band CLI management, Telnet Server, Telnet Server IPv6, TFTP Client, TFTP client IPv6, SNMPv1v2cv3, SNMP IPv6, SNMP trap, BootP/DHCP Client, Sntp, trusted host, trusted host IPv6, RMONv1, Syslog, Syslog IPv6.		
24	The switch should have Energy-saving green technology based on cable length & link status. IEEE 802.3az		
25	All types of switches & transceivers should be of the same make.		

BOQ 22: 10G Single mode Transceiver

Sl. #	Specification	Compliance (Yes/No)	Remarks
1	10G BASE-LR Single Mode SFP+ Transceiver with Duplex LC Connector		
2	Support IEEE 802.3ae standard		
3	Output TX Optical Power Max.: 0.5 dBm Min.: -8.5 dBm		
4	Input RX Optical Power Max.: 0.5 dBm Min.: -8.5 dBm		
5	Sensitivity -12.6 dBm		
6	Cable Type Single-mode 9/125 um fiber		
8	At least 10 Km distance support on single mode fiber interface		
9	The Transceiver module should be hot pluggable. MSA Compliant		
10	Operating wavelength: 1310nm		
11	Should be same make as switches.		
12	OEM should be ISO-9001, ISO-14001, ISO-45001 certified for design and development of networking products.		
13	OEM should have IEC-62443-4-1 certification.		
14	OEM should be present in India for minimum 10 years. Certificate of Incorporation to be submitted.		
15	OEM annual turnover should be min 3 Cr during last 3 years.		
16	All switches, Transceivers and access points should be from same OEM for ensuring 100% compatibility.		

BOQ 23: CAT6 UTP Cable (RED, YELLOW, BLUE)

Sl.#	Specification	Compliance (Yes/No)	Remarks
1	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-C.2 channel performance		
2	The 4 pair Unshielded Twisted Pair cable shall be UL Listed,		

	ETL Verified		
3	All Category 6 cables shall meet or exceed the following characteristics:		
4	Mechanical Characteristics		
5	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, full separator. Half shall not be accepted.		
6	Conductor dia: 23 AWG		
8	Insulation: polyethylene		
9	Pairing: Two insulated conductor twisted together		
10	No of Pair: 4 pair twisted together		
11	Color of sheath: LSZH GREY- Single sheath		
12	Rip Cord should be available		
13	Sequential meter marking should be available		
14	Temperature Rating: (- 20 to +60 C)		
15	Packing : 305 Mtrs.		
16	Low Frequency Electrical Parameter		
17	Conductor Resistance (DC): 9.38 OHMS/100 MTR @20 Degree C. MAX.		
18	Resistance Unbalance: 5% Max		
19	Mutual Capacitance: 5.6 nF/100 mtrs Max.		
20	Capacitance Unbalance Pair/Ground: 330PF/100M MAX		
21	Nominal Velocity of Propagation: 69%		
22	IMPEDANCE: 100±15% OHMS		
23	Worst Case cable skew: 45ns/100m		
24	Generally confirming to EIA/TIA 568-C.2 and IEC/ISO 11801		

BOQ 24: 24 Port Loaded LIU

Sl.#	Specification	Compliance (Yes/No)	Remarks
1	24-Port, 19" Rack Mount LIU Fully Loaded with Single Mode SC Adapters		
2	Aluminium/Steel base material with powder coating for light mounting		
3	Snap-in locker design, easy to change the adapter panels		
4	Front-mounted cable saddles for jumper management		
5	It should have a facility for managing splices & terminations		
6	It should have a rubber fiber slotted bracket built-in		
8	It should be capable of storing up to 3mtr of 900micron tight buffered fiber per adapter		
9	It should have a snap-in locker design for easy to change adapter panels for various connector patching		
10	It should have removable rubber grommet allowing for pre-terminated fibre trunk installation, cable protection & minimizing dust build-up.		
11	It should have at least 4 rubber cable plugs for cable entries.		
12	It should have removable front & top covers for better access to the interior of LIU		

13	It should be supplied with cable ties, mounting ear screws and spiral wrap tubes		
BOQ 25: Network Enclosure (15U)			
Sl.#	Specification	Compliance (Yes/No)	Remarks
1	15U, 19" 550mm Width, 450mm Depth, Wall Mount Networking Enclosure		
2	It should confirm to DIN 41494 or equivalent standard		
3	It should be welded construction with steel frame		
4	Lockable tough ended glass front door		
5	19" mounting angle made of formed steel		
6	Powdered coated standard finish		
8	Top & Bottom welded cover with vented & cable entry exit cutouts		
9	2 pairs of 19" mounting rails		
10	1U Cable Manager		
11	Roof Mounted Fan Unit		
12	230V AC, 6 way, 5/15 Amp Power Distribution Unit		
13	Mounting Hardware set.		
BOQ 26: MS Galvanized perforated race way cable tray for UTP cable			
Sl.#	Specification	Compliance (Yes/No)	Remarks
01	Galvanised polished MS perforated raceway tray of dimension 50mm×50mm×2mm for laying of UTP cable		
BOQ 27: Electrical points			
01	1.5 sq. mm cable		
02	1 sq. mm cable		
03	6 Module (200mm×75mm) Face plate and Back Box		
04	6 A switch – two for each point		
05	6 A Socket (3 pin) – two for each point		

Annexure-V

OEM AUTHORISATION LETTER

Original Equipment Manufacturer's authorisation letter (in Original Letter Head of OEM)

To
The Principal,
Parala Maharaja Engineering College,
Sitalapali, Berhampur,
Ganjam-761003

Subject: Direct Manufacturers Authorization

Ref: Tender No:

Name of Work: Supply, Installation, Testing and Commissioning of IP-based Digital CCTV, Wifi and LAN system for Classrooms and College Campus at PMEC Berhampur

Dear Sir,

We, an established and reputable manufacturer of IP-based Digital CCTV, Wifi and LAN system having a Corporate/Registered office at (address of OEM) do hereby authorize..... (name of bidder) and having their office at (bidder's address) as our representative to submit the above bid _____ dt _____ and subsequently negotiate and sign the contract with you for the supply of IP-based Digital CCTV, Wifi and LAN system manufactured by us and authorize the said firm to act on our behalf in fulfilling to supply, install, train & commission and provide all technical support and maintenance obligation as required by the contract.

We also hereby undertake to provide a full guarantee/ warranty Contract as agreed by the bidder in the event, the bidder is changed or the bidder fails to provide satisfactory after-sales and service during such period of Comprehensive Warranty/ and to supply all the spares/accessories/consumables/material/labour etc. during the said period through the appoint bidder by PMEC Berhampur.

We also hereby declare that we can manufacture and supply the quantity of the equipment tendered within the stipulated time and provide service to install, and commission through the bidder

We Also Compiled the Technical data sheet attached with the authorized signature and company seal.

Yours faithfully,
for

Signature of the Officer Authorized to sign this Document on behalf of the OEM.

Annexure-VI

BANK GUARANTEE FOR PERFORMANCE SECURITY

To
The Principal,
Parala Maharaja Engineering College,
Sitalapali, Berhampur,
Ganjam-761003

WHEREAS (name and address of the supplier) (herein after called “the supplier”) has undertaken, in pursuance of contract no..... dated to supply (description of goods and services) (herein after called “the contract”).

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of Rs.....(amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

.....

Name and designation of the officer

.....

Seal, name & address of the Bank and address of the Branch

Annexure - VII

Comprehensive Annual Maintenance Contract Agreement

THIS AGREEMENT made the.....day of, 20___ between the “**The Principal, Parala Maharaja Engineering College, Berhampur**” (hereinafter “the Purchaser”) of the one part and M/s..... (hereinafter called “the Supplier”) of the other part:

WHEREAS the Purchaser invited bids for certain Goods & ancillary services viz, Supply, Installation, Testing and Commissioning of CCTV, Wi-Fi, LAN System for central library at PMEC Berhampur including Comprehensive Annual Maintenance Services and has accepted a bid by the Supplier for the instruments & equipment specified below at the Consignee site including Comprehensive Warranty Maintenance Services for a period of 3 Years after two year of standard warranty period from the date of installation & commissioning of the instruments & equipment as per award of Contract No..... dated.....

NOW THIS AGREEMENT WITNESS AS FOLLOWS:

1. Maintenance Services shall consist of Preventive and Corrective maintenance of equipment specified above & will include repair and replacement of parts free of cost.
2. Preventive maintenance, monthly once, which includes:
 - 2.1. Check-up to ensure that device connection is proper, and cabling is in proper condition.
 - 2.2. Cleaning of the above instruments & equipment and checking the System Performance.
3. The Supplier is to furnish the tentative schedule of the preventive maintenance of the Warranty Maintenance Contract (WMC) to be carried out.
4. The parts replaced must be new parts or equivalent in performance to new parts.
5. The Supplier will also provide the same maintenance service in case of the movement of equipment from the place of original installation to a different place or location, if the equipment is shifted by the Purchaser to another place or location at the cost and risk of the purchaser.
6. Any complaint informed through telephone must be acknowledged with a Complaint No. by the Supplier which will be noted by Consignee. All further contact with the Supplier on such complaint will be initiated through that Complaint No. Once rectification done, that No. will be cancelled by both parties. A register is to be maintained by the Supplier where complaints are to be noted along with Complaint No.
7. The maintenance shall normally be done during the working hours of the customer.

8. The Service Engineer of the Supplier will be allowed to handle the respective plant & machinery only in the presence of the officer in charge at the Consignee site.
9. The Supplier should ensure that the maintenance job is not hampered/delayed due to paucity of spares/inadequate manpower etc.
10. The Supplier should submit the services call report, to the Consignee for each and every service call without fail.
11. In case of delay/lack of communication, downtime will be calculated as mentioned below in the WMC Clause.

Comprehensive Warranty Maintenance Contract Clause

Normal response time for repair is 24 hours from the actual time of reporting the problem to the supplier.

	Period	Extension of CAMC period
Response Time	Above 24 hrs & below 48 hrs	2 days for each day of delay
	Above 48 hrs & below 96 hrs	1 week for each day of delay
	Above 96 hrs	2 weeks for each day of delay
Down Time	Above 24 hrs & below 48 hrs	2 days for each day of delay
	Above 48 hrs & below 96 hrs	1 week for each day of delay
	Above 96 hrs	2 weeks for each day of delay

12. The Supplier evaluation data format for the CAMC of Consignee systems may be filled up for necessary action.
13. All formats after filled up should be signed at the end of each page by the Supplier.
14. After completion of the work/repair/maintenance, the Purchaser shall issue a certificate of completion to the supplier to that effect.

Signature
For the Purchaser
Name:
Designation:
Address:
Telephone No:

Signature
For the Supplier
Name:
Designation:
Address:
Telephone No:

PART II (PRICE BID)

Annexure-VIII (A)
(On the letterhead of the Firm)
Financial Bid/Price Bid Undertaking

Dear Sir,

1. I/we,..... submitted the financial bid for Tender No.....dated.....for “Supply, Installation, Testing and Commissioning of IP-based Digital CCTV, Wifi and LAN systems for Classroom and Central Library at PMEC Berhampur.
2. I/we thoroughly examined and understood instructions to tenders, scope of work, terms & conditions given in the tender document and agree to abide by them.
3. I/We hereby offer to execute the jobs at the following rates.
4. I/We, undertake that I/we are not entitled to claim any enhancement of rates on any account during the tenure of the completion of the work.

Sl No	ITEM	QUANTITY	UOM	UNIT PRICE in Rs.	AMOUNT in Rs.	Taxes in Rs.	Total Amount including Tax in Rs.
01	SITC of 4.0 MP IP Camera - Dome IR 30 Mtrs (Indoor)	136	No's				
02	SITC of 128 Channel NVR with 8 SATA Slot	2	No's				
03	SITC of Wi-Fi 6 Indoor Access Point	49	No's				
04	SITC of 24 Port GIGA POE Managed L2 Switch with Copper with 2 SFP UPLINK Port	9	No's				
05	SITC of 24 Port GIGA Non-POE Managed L2 Switch with Copper with 2 SFP UPLINK Port	14	No's				
06	SITC of 28 Port GIGA Non POE Managed L3 Switch with Copper with SFP UPLINK Port	1	No's				
07	SITC of 8 Port GIGA POE Managed Switch with 2 Copper UPLINK Port	2	No's				
08	SITC of 15U Rack, 550w×450d IP55 grade outdoor rack with 2 FAN, 1 cable manager, 1 PDU (5/15 Amp), mounting hardware	7	No's				
09	SITC of Cat6 UTP Cable (Box of 305 Mtrs) for Horizontal Cabling (RED)	18	Box				
10	SITC of Cat6 UTP Cable (Box of 305 Mtrs) for Horizontal Cabling (YELLOW)	06	Box				
11	SITC of Cat6 UTP Cable (Box of 305 Mtrs) for Horizontal Cabling (BLUE)	29	Box				
12	SITC of Cat6 I/O, Single Face Plate with SMB	473	No's				

13	SITC of 1U, 19", Cat6, 24 Port Loaded Patch panel	11	No's				
14	SITC of 2U, 19", Cat6, 48 Port Loaded Patch panel	7	No's				
15	SITC of Cat6 Patch Cord - 1 Mtr - Rack end (RED)	272	No's				
16	SITC of Cat6 Patch Cord - 1 Mtr - Rack end (YELLOW)	98	No's				
17	SITC of Cat6 Patch Cord - 1 Mtr - Rack end (BLUE)	576	No's				
18	Cat 6 UTP Keystone Jack (RED)	136	No's				
19	Cat 6 UTP Keystone Jack (YELLOW)	49	No's				
20	Cat 6 UTP Keystone Jack (BLUE)	288	No's				
21	SITC of 55 Inch SMART TV Display	2	No's				
22	SITC of 10 TB HDD	16	No's				
23	SITC of Connectivity Cables HDMI 5 Mtrs	2	No's				
24	SITC of CCTV Camera Mounting Box	136	No's				
25	SITC of 1 kVA Line Interactive UPS	5	No's				
26	SITC of pre-fabricated enclosure for UPS made of Plywood	5	No's				
27	SITC of 1G Single mode Transceiver	2	No's				
28	SITC of 10G Single mode Transceiver	6	No's				
29	SITC of 12 Port Loaded LIU	4	No's				
30	SITC of 24 Port Loaded LIU	1	No's				
31	SITC of Fiber Optic Pigtail	48	No's				
32	LCSC Fiber Patch cord 3 Mtrs	8	No's				
33	SITC of Galvanized tray for UTP Cable Laying	300	Mtrs				
34	2.5 mm copper electrical wire	9	Box				
35	1 mm copper electrical wire	4	Box				
36	6 A switch	500	No's				
37	3 pin 6 A socket outlet	500	No's				
38	6 Module (200mmX75mm) Face plate and Back Box	250	No's				
39	SITC of 25mm PVC Casing & Capping with accessories	1000	Mtrs				
40	SITC of 25mm PVC flexible	100	Mtrs				
41	UPS Wiring With Distribution Panel	2	No's				
Total quoted amount							

Note: The quantities mentioned against each item are indicative only and subject to change; however the above-mentioned quantities shall be used for financial evaluation.

Name & Sign of Bidder along with address:

Note:

1. Above rates shall include GST, all applicable taxes, fees, duties, levies, transportation charges, insurance charges, installation charges, material charges, labour charges and all other charges required for the successful completion of work.
2. Price Bid shall not contain any condition whatsoever and any conditional bids shall be rejected.

Place:

Date:

Signature of Bidder
Business Address
Seal of the Bidder

Annexure-VIII (B)
Price Schedule for Comprehensive Annual Maintenance Contract
after Completion of the Warranty Period.

ITEM	CAMC for four years after completion of one year warranty period				
Years	2nd Year	3rd Year	4th Year	5th Year	Total Amount
Amount (Rs)					
Amount including Tax (Rs)					

Note:-

1. Prices shall be quoted inclusive of all taxes, duties, freight, forwarding, and cost of labor for installation. In case of discrepancy between unit price and total prices, the lowest price shall prevail.
2. The cost of CAMC which includes preventive maintenance including testing & calibration as per technical/ service/ operational manual, labour and spares, after satisfactory completion of Standard warranty period may be quoted for next 3 years on yearly basis.
3. The payment of CAMC will be made as per payment terms of the bid document.
4. The uptime warranty and down time penalty shall be as per the bid document.
5. All software update should be provided free of cost during CAMC period.
6. The stipulations in Technical Specification will supersede above provisions.
7. The supplier shall keep sufficient stock of spares required during Annual comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Place:

Date:

Signature of Bidder
Seal of the Bidder

Annexure-IX

(Odisha Procurement Preference Policy for Micro and Small Manufacturing Enterprises'2023 [See para I (B)])

BIDDER'S AFFIDAVIT

(Applicable to Bidders who fall under the definition of Odisha Small Manufacturing Enterprises)

I, Shri/ Smt/ Ms..... (Designation) of (name of the Bidder Enterprise)..... solemnly state the following.

1. That annual turnover of my enterprise is less than Rs. 50 cr.
2. That my enterprise has a valid Udyam Registration bearing No..... within the jurisdiction of the State of Odisha
3. That manufacturing plant/unit of my enterprise is located in Odisha in Village/Town/City....., Block/ULB....., Dist
4. That the goods for which I am submitting this bid are manufactured in the above-mentioned manufacturing plant/unit of my enterprise.
5. That the goods to be supplied by my enterprise shall be its own manufactured goods.
6. That my enterprise shall not supply goods which are not manufactured by my enterprise.
7. That my enterprise has not been blacklisted/debarred by any Government organization from participating in the current procurement process.
8. That my enterprise comes under the definition of Odisha Small Manufacturing Enterprise (OSME), as defined in the policy, and is, therefore, eligible for preferences and relaxations provided in the policy for OSMEs.
9. That I am submitting this affidavit in response to the tender No.....datedinvited by (Organization Name)..... for supply of (item name).....

I certify that all information furnished by me as above are true and correct. If any information is found to be incorrect, I and my enterprise shall be liable for any punitive action as deemed appropriate by competent authority.

Date

Signature of Bidder

Name of the Bidder

Address

Mob No.

E-mail: