

West Bengal Electronics Industry Development Corporation Limited

Registered Office
Webel Bhavan, Block - EP & GP, Sector - V Bidhannagar, Salt Lake Kolkata 700091
Phone: 9133-2339-2228/226/327/316 'Fax: 9133-2357-1739/1708 email: contact@webel-india.com

NOTICE INVITING OPEN TENDER

Notice Inviting Tender No. EOT/COM/22-23/00094 Dated: 15-03-23

For: SELECTION OF VENDORS FOR SUPPLY , INSTALLATION & COMMISSIONING OF IP BASED CCTV SYSTEM AT 2 ND HOOGHLY RIVER BRIDGE UNDER HRBC.

The G.M (COM) on behalf of WEST BENGAL ELECTRONICS INDUSTRY DEVELOPMENT CORPORATION LIMITED invites Tender for the work detailed in table below:-

Brief Description of Work	Tender Document Money (Rs) [Non refundable]	Earnest Money Deposit (EMD) (Rs) [Refundable]	Last Date and Time of Bid Submission	TECHNICAL Bid Opening Date and Time
Selection of vendors for supply , Installation & Commissioning of IP based CCTV System at 2 nd Hooghly River bridge Under HRBC.	Rs.1,000/-	Rs. 100,000/-	28 March 2023 12:00 PM	30 March 2023 12:00 PM
BID Opening Venue	WEST BENGAL ELECTRONICS INDUSTRY DEVELOPMENT CORPORATION LIMITED Webel Bhavan, Block - EP & GP, Sector - V Bidhannagar, Salt Lake Kolkata 700091			

For Commercial Queries, Contact: Mr. Pratul Show, G.M (COM) E-Mail: pratul.show@webel-india.com

For Technical Queries, Contact: Sourav Guha Thakurta, GM (CIO) E-Mail: sourav.thakurta@webel-india.com

DATE & TIME SCHEDULE

Activity / Event Description	Date	Time
Last Query Submission	20 March 2023	12:00 PM
Last Query Response	20 March 2023	3:00 PM
Pre Bid Conference	21 March 2023	12:00 PM
Publishing Last Corrigenda (if any)	23 March 2023	12:00 PM
Submission of Bid(s)	28 March 2023	12:00 PM
TECHNICAL Opening	30 March 2023	12:00 PM
FINANCIAL Opening	30 March 2023	3:00 PM

NOTICE INVITING TENDER

1 . Technical Bid submission with digitally signed

The TECHNICAL BID is to be submitted duly digitally signed in the website [https //wbtenders.gov.in](https://wbtenders.gov.in)

2 . Financial Bid submission with digitally signed

The FINANCIAL BID is to be submitted duly digitally signed in the website [https //wbtenders.gov.in](https://wbtenders.gov.in)

3 . Price Bid/Financial Offer only if technical bid is qualified

The price bid / financial offer of the tenderer / bidder will be considered only if the technical bid of the tenderer is found qualified by the Tender Evaluation Committee (TEC) of WBEIDC. The decision of the TEC will be final and absolute in this respect.

SECTION A

ELIGIBILITY CRITERIA

1 . System Integrator

The Bidder/ASP/OEM should be a System Integrator.

Statutory

2 . Experience on the related job area

The bidder should have executed 1 single order of similar nature of jobs, particularly in CCTV INSTALLATION of Rs.10,000,000.00 each or more at any or The bidder should have executed 2 single order of similar nature of jobs, particularly in CCTV INSTALLATION of Rs.5,000,000.00 each or more at any or The bidder should have executed 3 single order of similar nature of jobs, particularly in CCTV INSTALLATION of Rs.3,500,000.00 each or more at any Govt. Department / Quasi Govt. Dept / PSU / Board / Council/ Large corporate or similar organization in last 3 financial years. Govt. Department / Quasi Govt. Dept / PSU / Board / Council or similar organization in last 3 financial years. Work Order copies along with job completion certificate from the customer duly self-attested are to be submitted. for verification, without which the bid will be treated as non responsive and summarily rejected.

Statutory

3 . Authorisation from OEMs

Bidders with tender specific authorization(s) from OEM(s), strictly in our format given in ANNEXURE-MAF in this tender document for all the items OEM(s) must accept their responsibility of supply, installation and comprehensive maintenance of services during warranty period as per ANNEXURE MAF.

Statutory

4 . Minimum Annual Turnover for the last financial year

Turnover of the last Financial Year (2021 - 2022) should be Rs.30,000,000.00 or above (Copy of audited Balance Sheet & P/L A/c duly certified by CA is required as proof).

Statutory

5 . Aggregate Annual Turnover

Aggregate of Turnover of last 3 Financial Years (01-04-19 - 31-03-22) should be Rs.100,000,000.00 or above (Copy of audited Balance Sheet & P/L A/c duly certified by CA is required as proof).

Statutory

6 . Company Profile & Article of Association

The Bidder must submit detail profile of the company and Articles of Association in the specified area of the job mentioned in this tender.

Statutory

7 . Incorporation certificate

The bidder should provide the certificate of incorporation under Comapny Act 1956.

Statutory

8 . No Consortium is allowed

The Bids shall be submitted by only the Bidder; no consortium is allowed in this Bid. Declaration in this regard needs to be submitted.


Statutory

9 . NO PART BID ALLOWED

Bidders have to quote all the items mentioned in tender document.No part bid will be accepted. Otherwise, the bid(s) will be treated as cancelled.

Statutory

10 . Statutory Documents-PAN & IT Returns

	Tender No. EOT/COM/22-23/00094 Dated: 15-03-23 For SELECTION OF VENDORS FOR SUPPLY , INSTALLATION & COMMISSIONING OF IP BASED CCTV SYSTEM AT 2 ND HOUGHLY RIVER BRIDGE UNDER HRBC.	Page No: 4
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Copies of valid PAN along with I-T return documents, for Financial Year 2018 2019, 2019-2020, 2020-2021 are to be enclosed with the bid.

Statutory

11 . Trade License

Copy of valid Trade License is to be enclosed with the bid.

Statutory

12 . Locations of Service Centres

The bidder must have at least 1 registered service center for IT in KOLKATA and service centers in at least 1 locations in KOLKATA Supporting documents for existence of Service Centre(s) has to be attached with the tender document.

Statutory

13 . Details of Office Locations

The Bidder must have office(s) in KOLKATA. (Copy of Trade License and contact details of the office(s), at the specified locations to be submitted along with the bid).

Statutory

14 . Banned by Govt. or like organizations

The bidder shall be required to give a declaration in their letter head that they have not been banned by any Government Agencies / Govt. Department / Quasi Govt. Dept / PSU / Board / Council or similar organization. If any Government Agencies / Govt. Department / Quasi Govt. Dept / PSU / Board Council or similar organization has banned the bidder and later on lifted the ban, the fact must be clearly stated.

Statutory

15 . Minimum number of years of existence

The bidding firm must be in existence for 3 years or more. (Documentary evidence has to be provided along with the bid)

Statutory

SECTION B

INSTRUCTIONS TO BIDDERS

General for e-Tender

1 . Registration of Bidder

Any Bidder willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement System, through logging on to <https://etender.wb.nic.in> . The Bidder is to click on the link for e-Tendering site as given on the web portal.

2 . Digital Signature Certificate (DSC)

Each Bidder is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the Web Site stated in Clause A.1. above. DSC is given as a USB e-Token.

3 . Search and Download

The Bidder can search & download N.I.T. & Tender Document(s) electronically from computer once he logs on to the website mentioned in Clause A.1. using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

4 . Submission of Tenders

Tenders are to be submitted through online to the website stated in Clause A (i). in two folders at a time for each work, one in Technical Proposal & the other is Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC) The documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

eTender Tender Evaluation Committee

1 . Definition of Tender Evaluation Committee

Tender Evaluation Committee constituted as per Order, Department of IT, Government of West Bengal will function as Evaluation Committee for selection of technically qualified bidders.

2 . Opening & Evaluation of Tender

If any Bidder is exempted from payment of EMD, copy of relevant Government Order needs to be furnished.

3 . Opening of Technical Proposal

Technical proposals will be opened by the WBEIDC Tender Committee electronically from the website using their Digital Signature Certificate (DSC).

4 . General Procedure

(1) Cover (folder) for Statutory Documents (Ref. Sl. No. A.(v).(a)) will be opened first and if found in order, cover (folder) for Non-Statutory Documents (Ref. Sl. No. A.5.(b).) will be opened. If there is any deficiency in the Statutory Documents the bid will be treated as non-responsive and Tender Committee will have the right to decide accordingly.

(2) Decrypted (transformed into readable formats) documents of the non statutory cover will be downloaded & handed over to the Tender Evaluation Committee.

(3) Summary list of technically qualified tenderers will be uploaded online.

(4) Pursuant to scrutiny & decision of the Tender Evaluation Committee the summary list of eligible tenderers & the serial number of work for which their proposal will be considered will be uploaded in the web portals.

(5) During evaluation the committee may summon of the tenderers & seek clarification / information or additional documents or original hard copy of any of the documents already submitted & if these are not produced within the stipulated time frame, their proposals will be liable for rejection.

(6) Intending tenderers may remain present if they so desire.

e-Tender Financial Proposal**1. Quoting rate in Price Bid**

The financial proposal should contain all items mentioned in the Price Bid. The Bidder is to quote the rate online through computer in the space marked for quoting rate in the Price Bid.

2. Digital Signature

Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the Bidder. Financial capacity of a bidder will be judged on the basis of information furnished.

3. Penalty for suppression / distortion of facts

If any tenderer fails to produce the original hard copies of the documents like Completion Certificates and any other documents on demand of the Tender Evaluation Committee within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies, it may be treated as submission of false documents by the tenderer and action may be referred to the appropriate authority for prosecution as per relevant IT Act.

4. Rejection of Bid

WBEIDCL reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time prior to the award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Employer's action.

5. Award of Contract

The Bidder whose Bid has been accepted will be notified by the Tender Inviting Accepting Authority through acceptance letter / Letter of Acceptance. The notification of award will constitute the formation of the Contract. All the tender documents including N.I.T. & B.O.Q. will be the part of the contract documents. After receipt of Letter of Intent, the successful bidder shall have to submit a PBG from a scheduled bank amounting to 3% of LOI value (format attached with this tender document).

Additional Instructions**1. Additional Instruction**

THE BIDDERS ARE REQUESTED TO SUBMIT THE BANK DETAILS ALONG WITH THE BID.

SECTION C

GENERAL TERMS & CONDITIONS

GENERAL TERMS AND CONDITIONS

1 . Awarding of Contract

WBEIDC Ltd will award the contract to the successful bidder whose bid has been valued as per Price and Other criteria . WBEIDC reserves the right not to accept the Lowest Price bid with out assigning any reason what so ever and the bidder will not challenge such decision in any forum what so ever WBEIDC also reserves the right to split the order and / or drop any line item as per direction of the end customer. The successful bidder will have to give security deposit of 3% of total value of the LOI in the form of BANK GURANTEE for a period of 60 days+ the maximum warranty period among the items quoted. After receiving the PBG, firm P.O will be issued.

2 . Amendment of Invitation

At any time 1 days prior to the deadline for submission of proposals, WBEIDC reserves the right to add / modify / delete any portion of this document by issuance of a Corrigendum, which would be published on the website and will also be made available to all the Bidders who have been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents (Techno Commercial as well as Price Bid).

3 . Amendment of Proposals

In order to afford prospective Bidder reasonable time to make amendment in their proposals, WBEIDC may, at its discretion, extend the deadline for the submission of proposals. However, no such request in this regard shall be binding on WBEIDC.

4 . Assignments

Assignment of the job to third party is not allowed without the consent of WBEIDC Ltd.

5 . PBG SUBMISSION AFTER LOI

You are requested to convey your acceptance of this Letter of Intent and to submit the desired information at an early date and submit the required Bank Guarantee in the attached prescribed format within a period of 14 days from the date of placement of this Letter of Intent, failing which this Letter of Intent is likely to be treated as cancelled.

6 . Rejection of BID

Any deviation from the given specification and make, will be treated as rejected.

7 . Canvassing

Canvassing or support in any form for the acceptance of any tender is strictly prohibited. Any bidder doing so will render him liable to penalties, which may include removal of this name from the register of approved Contractors.

8 . Date & Time validity of the quotation

Any quotation submitted later than the date and time mentioned above will not be accepted

9 . Discrepancies and Adjustment thereof

Discrepancy between description in words and figures, the rate, which corresponds to the words quoted by the bidder, shall be taken as correct. Discrepancy in the amount quoted by the bidder due to calculation mistake of the unit rate, the unit rate shall be regarded as firm. Discrepancy in totaling or carry forward in the amount quoted by the bidder shall be corrected.

10 . Disputes and Arbitrations

In case of any dispute or differences, breach and violation relating to the terms of this agreement, the said dispute or difference shall be referred to the sole arbitration of Managing Director, WBEIDC Ltd. or any other person appointed by him. The award of the arbitrator shall be final and binding on both the parties. In the event of such arbitrator to whom the matter is originally referred to vacates his office on resignation or otherwise or refuses to do works or neglecting his work or being unable to act as arbitrator for any reason whatsoever, the Managing Director shall appoint another person to act as arbitrator in the place of outgoing arbitrator and the person so appointed shall be entitled

to proceed further with the reference from the stage at which it was left by the predecessor. The Contractor will have no objection in any such appointment that arbitrator so appointed is employee of WBEIDC Ltd. The adjudication of such arbitrator shall be governed by the provision of the Arbitration and Conciliation Act, 1996, or any statutory modification or re-enactment thereof or any rules made thereof. The arbitration shall be held in Kolkata only.

11 . GTC-EMD-ONLINE PAYMENT

//The bidder shall pay an EMD of Rs. 100,000 through Net banking or through RTGS/NEFT through the <https://wbtenders.gov.in> //portal as per G.O 3975-F(Y) dated 28th July, 2016 issued by Finance department Govt. of West Bengal. //For detail payment procedure & guideline on the same bidders are advised to follow the same order. //You may find the GO by clicking the link <https://bit.ly/2zZ4i6e>

12 . Force Majeure Condition

If the execution of the contract/supply order is delayed beyond the period stipulated in the supply order as result of outbreak of hostilities, declaration of an embargo or blockade of road, fire, flood or any such act of nature, then WBEIDC LTD may allow such additional time by extending the project execution timeframe as considered to be justified by the circumstances of the case and its decision will be final. If additional time is granted by the WBEIDC LTD, the supply order shall be read and understood as if it had contained from its inception the execution date as extended.

13 . Inclusion of freight & insurance

Price quoted should be inclusive of freight & insurance upto the delivery locations.

14 . Formats and Signing of Proposals

The original proposal shall be neatly typed and shall be signed by an authorized signatory / signatories on behalf of the Bidder. The authorization shall be provided by written Power of Attorney accompanying the proposal. The person or persons signing the proposal shall initial all pages of the proposal, except for un-amended printed literature. The proposal shall contain no interlineations, erase or overwriting. In order to correct errors made by the Bidder, all corrections shall be done & initialed with date by the authorized signatory after striking out the original words / figures completely.

15 . Governing Laws

This Tender Document and the contract shall be governed by and interpreted in accordance with Laws in force in India. The courts at Kolkata shall have exclusive jurisdiction in all matters arising under the contract.

16 . Insertion of Webel's GST in Vendor invoice

All bills/ invoices must be raised / submitted with proper GSTIN No. of WBEIDC Ltd (GSTIN No.- 19AAACW2411Q1Z1) for releasing payment.

17 . Late Proposals

Any proposal received by WBEIDC after the deadline for submission of proposals, as referred above shall not be accepted.

18 . Language of Proposal & Correspondence

The proposal submitted by the Bidder should be in English language only. All the documents relating to the proposal (including brochures) supplied by the firm should also be in English, and the correspondence between the Bidder & WBEIDC will be in English language only. A duly signed formal copy must subsequently confirm the correspondence by Fax / e-mail.

19 . Non escalation of Price

The price offers shall remain firm within the currency of contract and no escalation of price will be allowed.

20 . Non-eligibility of bid by Webel Group Company

No Webel group company allowed to bid in WBEIDC tenders, and bids will be summarily disqualified if received from any WEBEL group company.

21 . Availability of PAN

Any quotation submitted without PAN of the vendor will be summarily rejected.

22 . Proposal Currency

Prices shall be quoted in Indian Rupees, inclusive of all prevailing taxes, levies, duties, etc.

23 . Cancellation of PO

WBEIDC Ltd. reserves the right to cancel Purchase Order if the agreed delivery schedule is not adhered to by the supplier. Any loss arising out of such delay in the supply of the equipment / service, shall be on the supplier account.

24 . Period of Validity of Proposals

The price offers shall remain firm within the currency of contract and no escalation of price will be allowed. The quoted offer and / or rate must be valid for a minimum period of 180 Days from the date of opening of the tender. The tender inviting authority reserves the right for seeking extension of validity of offered rates from the successful bidder. Acceptance of such request during actual offer is however optional to the bidder. The price validity will remain unaltered irrespective of any reason including foreign exchange rate variation. Variation in statutory rate levied by Government will however be reflected for both reduction and escalation.

25 . Whom to report

Reporting: You have to report to MR.SOURAV GUHA THAKURTA, GM-CIO for TECHNICAL purposes.

26 . Deduction of Tax at Source

Deduction of all statutory and necessary Tax from each bill will be made as per Government Rules prevailing at the time of payment. The Company will issue necessary tax deduction certificate in due course of time.

27 . Additional Terms & Conditions

AT THE TIME ACCEPTING LOI, VENDOR IS ADVISED TO CHECK THE GST PERCENTAGE MENTIONED IN THE LOI. IN CASE OF ANY CHANGE BIDDER MUST INFORM GM (COMMERCIAL) IN WRITING PRIOR TO ISSUE OF THE PURCHASE ONCE PURCHASE ORDER ISSUED NO SUBSEQUENT REQUEST FOR CHANGE IN GST PERCENTAGE WILL BE ENTERTAIN

SECTION D

SPECIAL TERMS & CONDITIONS

SPECIAL TERMS AND CONDITIONS

- 1. Consignee Details**
Consignee Details: OFFICE OF THE HOOGHLY RIVER BRIDGE COMMISSIONERS.
- 2. Delivery time period**
ALL ITEMS must be delivered and installed within 4 WEEKS from the date of issuance of LOI.
- 3. Delivery Locations**
Delivery/Installation location:
AS DIRECTED BY OFFICE OF THE HOOGHLY RIVER BRIDGE COMMISSIONERS, MUNSHI PREM CHAND SARANI (ST. GEO ROAD),KOLKATA-700021 AND CUSTOMER'S ENQUIRY LETTER WITH OFFER OF WBEIDC.
NOTE : 1) VENDOR MUST QUOTE WITH HSN/SAC CODE IN BOQ.
2) ALL DOCUMENTS UPLOADED HEREWITH.
- 4. Taxes all inclusive**
Price will be all inclusive including tax, installation, freight, insurance & any other charges. Tax portion should be mentioned separately.
- 5. Liquidated Damage**
As per the job mentioned in the tender document; In the event of failure to meet the job completion in stipulated date/time liquidated damage may be imposed on the Vendor(s) for sum equivalent to 1.00% of the contract value for each week or part thereof, subject to a ceiling of 5.00% of the contract value (including all taxes & duties and other charges). In the event of LD exceeds 5.00% of the order value, WBEIDC reserves the right to terminate the contract and WBEIDC will get the job completed by any other competent party. The difference of cost incurred by WBEIDC will be recovered from the earnest money deposited / PBG / Invoice submitted by the vendor (as applicable).
- 6. Payment Authority**
Payment sanctioning authority: MR.SOURAV GUHATHAKUTA,GM-CIO.
- 7. Payment Terms**
Payment will be made on submission of bills along with the receipted Challan & successful installation certificate from the END CUSTOMER
Payment will be released within 30 days after receiving payment from the end customer.
- 8. Security Deposit**
Successful bidder will have to submit a performance bank guarantee within 14 DAYS of issuance of LOI, amounting 3% total ordered value in the format given in the tender document for a validity period of 60 DAYS more than the warranty period (3 YEARS from the date of final acceptance of the end customer) of the quoted items.
- 9. Service Level Agreement**
Service Level: Resolution time should be 24 HRS. If not resolved within 24 HRS., a penalty of 0.5% of equipment cost per day will be levied and will be adjusted against the balance payment/PBG held with WBEIDC Limited.
- 10. Warrants Support - Period**
The equipment along with the solution supplied will be warranted for 36 MONTHS from the date of ACCEPTANCE of the system whole or part. Service support for the entire warranty period will be ONSITE and COMPREHENSIVE and free of cost for the entire warranty period.
- 11. Additional Terms & Conditions**
THE DETAILS TECHNICAL SPECIFICATION AND SCOPE OF WORK IS ATTACHED AS ANNEXURE IN THIS TENDER DOCU

BOQ, TECHNICAL SPECIFICATIONS & DELIVERY LOCATIONS

SL. No.	Description / Specification	Qty	UOM	Delivery Location
1	4 MP IP PTZ Camera	12	Nos.	
2	5 MP IP VF Bullet Camera	60	Nos.	
3	8 Port PoE Switch with 2 SFP	32	Nos.	
4	24 Port Core Switch	1	Nos.	
5	1G 1 KM SFP Module	64	Nos.	
6	32 channel NVR	3	Nos.	
7	6 TB HDD	10	Nos.	
8	55" Monitor Display (24X7)	1	Nos.	
9	6 Core Armored OFC Multi loose tube, SM	7,800	METERS	
10	DIN RAIL Mount Fiber Optic Patch Panel duplex LC,SM	33	Nos.	
11	Fiber Patch Cord LC Duplex	35	Nos.	
12	Fiber Termination Kit enclosure	32	Nos.	
13	CAT-6 UTP 23 AWGFR-PVC	3,050	METERS	
14	CAT 6 Filed termination Plug	72	Nos.	
15	CAT-6 2 Mtr. Patch Cord	72	METERS	
16	Outdoor Junction Box	32	Nos.	

SL. No.	Description / Specification	Qty	UOM	Delivery Location
17	Power Manager	32	Nos.	
18	Power Board with 3 Socket	2	Nos.	
19	Line interactive UPS 1 KVA	32	Nos.	
20	Online UPS 1KVA with 30 mins Backup	1	Nos.	
21	HDMI Cable 5 meters	1	Nos.	
22	20mm PVC Pipe	3,050	METERS	
23	3 Core Power Cable	7,200	METERS	
24	32MM HDPE	7,200	METERS	
25	CAT6 with PVC Pipe Laying	3,050	METERS	
26	Installation of Outdoor Junction	32	NUMBER	
27	OFC,Power Cable with HDPE Laying	7,200	METERS	
28	Fiber laying thru softsoil	1,000	METERS	
29	Installation & Commissioning	1	Job	

Payment Terms Details

Payment Terms Code	Description
B2B-30D	Payments term will be back to back and will be paid after 30 days of payment received from customer.

COMPLIANCE SHEET

SL. No.	Description / Specification	Qty	UOM	Offered Specification	Compliant (Yes/No)	Deviation Details (if any)
1	4 MP IP PTZ Camera	12	Nos.			
2	5 MP IP VF Bullet Camera	60	Nos.			
3	8 Port PoE Switch with 2 SFP	32	Nos.			
4	24 Port Core Switch	1	Nos.			
5	1G 1 KM SFP Module	64	Nos.			
6	32 channel NVR	3	Nos.			
7	6 TB HDD	10	Nos.			
8	55" Monitor Display (24X7)	1	Nos.			
9	6 Core Armored OFC Multi loose tube, SM	7,800	METERS			
10	DIN RAIL Mount Fiber Optic Patch Panel duplex LC,SM	33	Nos.			
11	Fiber Patch Cord LC Duplex	35	Nos.			
12	Fiber Termination Kit enclosure	32	Nos.			
13	CAT-6 UTP 23 AWGFR-PVC	3,050	METERS			
14	CAT 6 Filed termination Plug	72	Nos.			
15	CAT-6 2 Mtr. Patch Cord	72	METERS			
16	Outdoor Junction Box	32	Nos.			

SL. No.	Description / Specification	Qty	UOM	Offered Specification	Compliant (Yes/No)	Deviation Details (if any)
17	Power Manager	32	Nos.			
18	Power Board with 3 Socket	2	Nos.			
19	Line interactive UPS 1 KVA	32	Nos.			
20	Online UPS 1KVA with 30 mins Backup	1	Nos.			
21	HDMI Cable 5 meters	1	Nos.			
22	20mm PVC Pipe	3,050	METERS			
23	3 Core Power Cable	7,200	METERS			
24	32MM HDPE	7,200	METERS			
25	CAT6 with PVC Pipe Laying	3,050	METERS			
26	Installation of Outdoor Junction	32	NUMBE			
27	OFC,Power Cable with HDPE Laying	7,200	METERS			
28	Fiber laying thru softsoil	1,000	METERS			
29	Installation & Commissioning	1	Job			

ANNEX - BID FORM

(Bidders are requested to furnish the Bid Form in the Format given in this section, filling the entire Blank and to be submitted on Letter Head)

Ref No : (Mandatory)

Date : (Mandatory)

To,
Dy. General Manager (Commercial)
WBEIDC Ltd
Webel Bhavan
Block EP & GP, Sector-V
Salt Lake Electronics Complex
Kolkata-700091

Dear Sir,

Having examined the Bid documents we, the undersigned, offer to undertake the job of "<Tender Title>" as per the Tender No. _____ dated _____.

We agree to abide by this bid for the period of 6 (six) months from the date for fixed for price bid opening and it shall remain binding upon us for acceptance at any time before the expiry of the period.

This bid, together with your written acceptance thereof and your order / notification of award, shall constitute a binding contract between us.

We understand that WBEIDC reserves the right to accept in full / part or reject any or all the bids received or split order within successful bidding without any explanation to bidders and its decision on the subject will be final and binding on Bidder. We also understand that WBEIDC is not bound to accept the L-1 bid for placement of order.

We had given an EMD/BG of Rs. _____ (DD/BG No _____ dated _____ on _____) along with the technical document.

We also abide to go through bank Guarantee of 5% of the job value as Performance Bank Guarantee.

Dated, this _____ day of _____, 20__

Signature

.....
(In capacity of)
Duly authorized to sign bid for and on behalf of
(Name and Address of the Bidder)

(Affix Official Seal)

ANNEX - BOM & TECHNICAL SPECIFICATIONS

ALL TECHNICAL PARAMETERS OF ITEMS ARE MANDATORY. NO DOWNWARD DEVIATION IS ALLOWED. IN CASE OF ANY DEVIATIONS IN SPECIFICATIONS OF THESE ITEMS, THE BID WILL BE SUMMERILY REJECTED.

The bidder has to attach a technical compliance sheet in the following format:

Sl. No.	Description of Items	Make & Model No.	Qty	Unit	Offered Specification	Remarks
1						

ANNEX – MAF
(MANUFACTURER'S AUTHORISATION FORM)

(TO BE SUBMITTED ON OEM LETTERHEAD, SIGNED BY A PERSON COMPETENT AND HAVING THE POWER OF ATTORNEY [Notarized copy to be attached] TO BIND THE PRODUCER) Without this MAF, the bid is liable to be rejected.

Tender No. _____

Date: _____

Dy. General Manager (Commercial)
WBEIDC LTD ,
Block-EP&GP, Webel Bhawan,
Sector-V ,Salt Lake , Kolkata-700 091.

WHEREAS _____ who are official producers of _____ and having production facilities at _____ do hereby _____ authorize _____ located at _____ (hereinafter, the "Bidder") to submit a bid of the following Products produced by us, for the Supply Requirements associated with the above Invitation for Bids.

[Note : Please Specify the Product Name & Model No here.]

When resold by _____ these products are subject to applicable warranty terms of this NIT.

We assure you that in the event of _____ not being able to fulfill its obligation as our Sales & Service Provider in respect of this NIT, we would continue to meet our the terms stated in the abovementioned NIT through alternate arrangements.

We also confirm that _____ is our authorized service provider / system integrator and can hence provide maintenance and upgrade support for our products.

We also undertake to supply the materials in the event of the non-supply of the materials by _____ as per the NIT and assure you the availability of spares for the products for the next two years after the expiry of three years comprehensive on-site warranty.

Name _____ In the capacity of _____

Signature

Note: This letter of authority must be on the letterhead of the Manufacturer, must be signed by a person competent and having the power of attorney (Notarized copy to be attached) to bind the Producer, and must be included by the Bidder in its bid as specified in the Instructions to Bidders.

ANNEX – PBG

PERFORMANCE SECURITY GUARANTEE BOND

1. In consideration of the MD , WBEIDC (hereinafter called "WBEIDC") having agreed to exempt _____ (hereinafter called 'the said contractor(s)') from the demand under the terms and conditions of an agreement/Advance Purchase Order No _____ dated _____ made between _____ and _____ for the supply of _____ (hereinafter called "the said agreement "), of security deposit for the due fulfillment by the said contractor (s) of the terms and conditions contained in the said Agreement, on production of the bank guarantee for _____ we, (name of the bank) _____ (hereinafter refer to as "the bank") at the request of _____ (contractor(s)) do hereby undertake to pay to the WBEIDC an amount not exceeding _____ against any loss or damage caused to or suffered or would be caused to or suffered by WBEIDC by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.
2. We (name of the bank) _____ do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the WBEIDC by reason of breach by the said contractor(s)' of any of the terms or conditions contained in the said Agreement or by reason of the contractors(s)' failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of WBEIDC in these counts shall be final and binding on the bank. However, our liability under this guarantee shall be restricted to an amount not exceeding _____.
3. We undertake to pay to the WBEIDC any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/supplier(s) in any suit or proceeding pending before any court or tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor(s)/supplier(s) shall have no claim against us for making such payment.
4. We(name of the bank) _____ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the WBEIDC under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till _____ (office/Department) WBEIDC certifies that the terms and conditions of the said Agreement have been fully or properly carried out by the said contractor(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the expiry of TWO/TWO AND HALF/THREE YEARS (as specified in the tender no.....) from the date hereof, we shall be discharged from all liabilities under this guarantee thereafter.
5. We (name of the bank) _____ further agree with the WBEIDC that the WBEIDC shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the WBEIDC against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the WBEIDC or any indulgence by the WBEIDC to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s)/supplier(s).

7. We (name of the bank) _____ lastly undertake not to revoke this guarantee during its currency except with the previous consent of the WBEIDC in writing.

Dated the _____ day of _____, 20 _____

for _____
(Indicate the name of bank)

ANNEX - TECHNICAL COMPLIANCE STATEMENT

ALL TECHNICAL PARAMETERS OF ITEMS ARE MANDATORY. NO DOWNWARD DEVIATION IS ALLOWED. IN CASE OF ANY DEVIATIONS IN SPECIFICATIONS OF THESE ITEMS, THE BID WILL BE SUMMERILY REJECTED.

The bidder has to attach a technical compliance sheet in the following format:

Sl. No.	Description of Items	Make & Model No.	Qty	Unit	Offered Specification	Remarks
1						

PRICE BID

The price has to be submitted online only.

ANNEX – EXP PROF
EXPERIENCE PROFILE

Name of the Firm:

List of projects completed that are similar in nature to the works executed during the last 3 (three) years, as stated above:

Sl. No.	Customer's Name	PO No. and Date	Value in Rs.	Date of Successful Completion of the job	Completion Certificate Date issued by Customer

Note:

- i. Certificate from the Customers to be attached
- ii. Non-disclosure of any information in the Schedule will result in disqualification of the firm

Signature of applicant including title
and capacity in which application is made.

ANNEX - SAO
STRUCTURE AND ORGANISATION

1) Name of Applicant	:	
2) Office Address	:	
Telephone No.	:	
Fax No.	:	
3) Name and Address of Bankers	:	
4) Attach an organization chart showing the structure of the company with names of Key personnel and technical staff with Bio-data.	:	

Note: Application covers Proprietary Firm, Partnership, Limited Company or Corporation.

Signature of applicant including title
and capacity in which application is made.



SUPPLY, INSTALLATION, TESTING &
COMMISSIONING OF IP BASED CCTV SYSTEM AT
HOOCHLY RIVER BRIDGE

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INTRODUCTION:

It is proposed to install IP based CCTV SURVEILLANCE SYSTEMS at Hooghly River Bridge to monitor the movements of vehicles and peoples at different locations at this bridge with the following objectives: -

- 24x7x365 Surveillance of the designated locations.
- To monitor the human behaviour and movement.
- Traffic flow observation.
- Live monitoring of activities in all portion of this bridge, from the point of view of crime and accident prevention and detection.
- To check the activities of mischievous elements and overall security of the bridge area.
- Identification of disaster/emergencies and response thereon.
- Immediate incident detection and effective management of police response.
- To create a central command and control centre.
- Video Analytics including Line Crossing Detection & Camera Tampering etc.

SCOPE OF WORK:

- **Design, engineering , supply , installation , testing and commissioning & training of the CCTV system as per the tender specification**
- **Supply of PTZ Camera and Veri-Focal Bullet Camera with Network Video Recorder , Display Unit , cables for monitoring and control functions from the console**
- **Providing real time monitoring and surveillance of a facility's environment, traffic and people**
- **Recording and storing of events of subsequent investigation , proof of compliance /audit purpose**
- **Training of Designated person**
- **Maintenance of OFC network and CCTV for 2 years**
- **Future upgradation of Video Analytics mainly line crossing detection to monitor abnormal movement of human beings and car to control suicide activity and accident also .**

BOQ

Sl. No.	Description	Unit	Qty
1	4MP IP PTZ Camera	Nos	12
2	5MP IP VF Bullet Camera	Nos	60
3	8 Port PoE Switch with 2 SFP	Nos	32
4	24 Port Core Switch	Nos	1
5	1G 1KM SFP Module	Nos	64
6	32 Channel NVR	Nos	3
7	6TB HDD	Nos	10
8	55" Monitor Display (24x7)	Nos	1
9	6 Core Armored OFC Multi loose tube , SM	Mtr	7800
10	DIN RAIL Mount Fiber optic Patch Panel duplex LC , SM	Nos	33
11	Fiber Patch Cord LC duplex	Nos.	35
12	Fiber termination kit Enclosure	Nos	32
13	CAT 6 UTP 23AWGFR-PVC	Mtr	3050
14	CAT 6 Filed termination plug	PCs	72
15	Cat 6 2mtr Patch cord	Mtr	72
16	Outdoor Junction Box	Nos	32
17	Power Manager	Nos	32
18	Power Board with 3 Socket	Nos	2
19	Line interactive UPS 1KVA	Nos	32
20	Online UPS 1KVA with 30mins Backup	Nos	1
21	HDMI Cable 5mtr	Nos	1
22	20mm PVC pipe	Mtr	3050
23	3 Core Power Cable	Mtr	7200
24	32MM HDPE	Mtr	7200
25	CAT6 with PVC Pipe Laying	Mtr	3050
26	Installation of outdoor junction	pcs	32
27	OFC, Power Cable with HDPE Laying	Mtr	7200
28	Fiber laying thru softsoil	Mtr	1000
29	Installation & Commissioning	Lot	1

OEM PRE-QUALIFICATION CRITERIA

A	Pre-Qualification for CCTV/ NVR Manufacturer
Sl. No.	Descriptions
1	The OEM of the IP CCTV Camera should have direct registered office in India for minimum 6 years. Registered offices by way of Joint ventures, Franchise, distribution partners will not be considered. Also, Merger or takeover of Joint ventures /new companies less than 3 years will not be considered.
2	The OEM of the IP CCTV Camera & NVR must be a member &/or listed in the ONVIF website. The quoted products must be in Conformant Product List and must be listed on ONVIF website. The CCTV OEM should not have been Banned / Backlisted / Suspended from ONVIF Forum within the last five years from the date of publishing the bid.
3	The OEM of the IP CCTV Camera should have direct service centre and direct toll-free number in India.
4	The OEM of the IP CCTV Camera should have ISO 9001, ISO 14001 & ISO 45001 Certificates for manufacturing and ISO 27032 Certificate for Cyber Security.
5	The CCTV OEM should not be blacklisted/debarred by any Ministry of Government of India or by Government of any other State in India or any of the Government PSUs or Globally within the last five years from the date of publishing the bid. Declaration to the same from an Authorized Signatory having a Power of Attorney to be submitted along with the bid.
6	The CCTV OEM should comply to the land border clause. The Camera OEM Principal or its Subsidiary should not have any linkage in the form of share holding from a company which shares a land border with India. Also, the CCTV OEM should not have any directors who are nationals from countries sharing land border with India.
7	The OEM should have minimum of 50 employees in India. Employee Strength of other business line such as System Integration, Consumer durable business etc shall not be considered
B	Pre-Qualification for Monitor Manufacturer
Sl. No.	Descriptions
1	OEM should have presence in India for last 10 years
2	Manufacturing Authorization letter should be attached with tender
3	OEM should have own service center in West Bengal for last 10 years
4	OEM should have R & D facilities
5	OEM should be ISO 9001:14001 Certified (Certificate to be provided during bid submission)
6	Should not be blacklisted by any Govt/ Semi Govt/ PSU etc.
C	Pre-Qualification for Switch/ Active Networking Device Manufacturer
Sl. No.	Descriptions
1	OEM should have valid ISO 9001:2015 for a quality management system for wired & wireless networking products
2	OEM should have CE, FCC compliance
3	OEM should have presence in India for the last 10 years

D	Pre-Qualification for Passive Networking Device Manufacturer
Sl. No.	Descriptions
1	OEM must be have TIA Steering committee member and must be a member in the BICSI organization.
2	OEM shall have RCDD certified manpower in India for design support and validation. Certificate is Mandatory.
3	OEM should have valid ISO 9001 and ISO 14001 certificate on Design, development and manufacture of SW and HW solutions for communication networks.
4	All the Fiber and Copper components should be from a single OEM.
5	All the products must have RoHS Compliance
E	Pre-Qualification for UPS Manufacturer
Sl. No.	Descriptions
1	'Previous Experience: UPS OEM should have successfully deployed in a single order, minimum 9000 nos. of 1 KVA capacity On-Line UPS System in any Govt. or PSU organisation in PAN India during last 5 years.
2	OEM should have Turnover of Minimum Rs.200 Crores in last three Financial Year. OEM should have earned Profit during the last 3 Financial Year.
3	'UPS OEM should have 300 Engineer on their own payroll within the Pan India.

Technical Specification :

2MP PTZ Dome Camera with 33x Optical Zoom				
S. No.	Parameter	Specification	Compliance (Yes/No)	Remarks
1	Video Compression	H.265 or above The camera OEM Should be an official valid H.265 HEVC licensee and should be listed on HEVC website at the time of submitting bid.		
2	Video Resolution	1920 X 1080 or better		
3	Frame rate	1920x1080 @ 25/30 FPS		
4	Operating frequency	50 Hz		
5	Image Sensor	1/2.8" Progressive scan CMOS or better		
6	Lens Type	Varifocal Motorized with Remote Focus & Zoom		
7	Lens	As per OEM design to meet 33X Optical Zoom		
8	Optical Zoom	33x or better		
9	Digital Zoom	16x or better		
10	Electronic Shutter	1/5 to 1 / 50,000 s or better		
11	Multiple Streams	The Camera shall be able to set up and stream out minimum three (3) stream profiles simultaneously. Each stream profile can have its own compression resolution, frame rate and quality independently. Should support minimum two (2) streams at 2 Mega Pixel.		
12	Minimum Illumination	Color mode: 0.005 lux @ F1.6 or better B/W: 0 lux with IR illumination on		
13	IR Cut Filter	Automatically Removable IR-cut filter		
14	Day/Night Mode	Yes, with IR Cut Filter.		
15	S/N Ratio	≥ 55 dB		
16	Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -15° ~ +90° (auto flip)		
17	Manual Control Speed	Pan: 0.1°/s~240°/s,; Tilt: 0.1°/s~180°/s		
18	Preset Speed	Pan: 300°/s; Tilt: 240°/s		
19	Preset	Minimum 500 Preset Points		
20	Auto adjustment + Remote Control of Image settings	Brightness, Sharpness, Contrast, White Balance, Exposure Control, Backlight Compensation, Gain Control, 3DNR, HLC, Defog, ROI, EIS, Scheduled Profile Settings & Video Title and Time Stamp Overlay		
21	Wide Dynamic Range	True WDR 120 db or better		
22	Privacy Masks	Minimum 20		
23	Audio	Full duplex, line in and line out, G.711/ G.726, External microphone input, External line output		
24	Local storage	Minimum 128GB and should support up to 512 GB.		
25	Protocol	IPv4, IPv6, ICMP, TCP, UDP, DHCP, PPPoE, RTP/RTSP/RTCP, DNS, DDNS, NTP, FTP, NFS/SMB/CIFS, UPnP, HTTP, HTTPS, SMTP, 802.1x,		

		SNMP, Multicast, SFTP, SSL/TLS, ONVIF Profile S, G & T		
26	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption, IEEE 802.1X network access control & AES Video Encryption		
27	Intelligent Video	Motion Detection, Camera Tampering, Line Crossing, Intrusion, Object Left, Object Missing, Face Detection, People Counting and Auto Tracking		
28	Event Trigger	Camera tampering detection, digital input, manual trigger, motion detection, SD card full		
29	Event Action	Event notification via digital output, email, HTTP, FTP, SD card File upload via email, HTTP, FTP, SD card		
30	Alarm I/O	Minimum 1 Input & 1 Output contact for 3rd party interface		
31	Operating conditions	As per city Ambient conditions in all seasons		
32	Interface	RJ 45, 100 Base TX		
33	Humidity	Humidity 10-95% RH (condensing)		
34	Casing	IP66/IP67, IK10, NEMA 4X or higher		
35	Certification	UL 62368-1, CE, FCC, RoHS & BIS		
36	Power	PoE IEEE 802.3af/ POE+ IEEE 802.3at and 12VDC/24AC/24VDC		
37	IR illuminator	Inbuilt IR Illuminator with range of 150 meters based upon requirement of site/focus/area of interest.		

SMP Bullet Camera with 2.7~13.5mm Motorized Lens

S. No.	Parameter	Specification	Compliance (Yes/No)	Remarks
1	Video Compression	H.265 or above The camera OEM Should be an official valid H.265 HEVC licensee and should be listed on HEVC website at the time of submitting bid.		
2	Video Resolution	2592x1944 or better		
3	Frame rate	2592x1944		
4	Operating frequency	50 Hz		
5	Image Sensor	1/2.8" Progressive scan CMOS or better		
6	Lens Type	Varifocal Motorized with Remote Focus & Zoom		
7	Lens	2.7~13.5mm		
8	Electronic Shutter	1/5 to 1 / 50,000 s or better		

9	Multiple Streams	The Camera shall be able to set up and stream out minimum three (3) stream profiles simultaneously. Each stream profile can have its own compression resolution, frame rate and quality independently.		
10	Minimum Illumination	Color mode: 0.005 lux @ F1.6 or better B/W: 0 lux with IR illumination on		
11	IR Cut Filter	Automatically Removable IR-cut filter		
12	Day/Night Mode	Yes, with IR Cut Filter.		
13	S/N Ratio	≥ 55 dB		
14	Auto adjustment + Remote Control of Image settings	Brightness, Sharpness, Contrast, White Balance, Exposure Control, Backlight Compensation, Gain Control, 3DNR, HLC, Defog, ROI, EIS		
15	Wide Dynamic Range	True WDR 120 db or better		
16	Privacy Masks	Minimum 4		
17	Audio	Full duplex, line in and line out, G.711/ G.726, External microphone input, External line output, Built-in Mic		
18	Local storage	Minimum 128GB and should support up to 512 GB.		
19	Protocol	TCP/IP, UDP, IPv4, ICMP, HTTP, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, ONVIF Profile S, G & T		
20	Security	Password Protection, IP Address filtering, AES Video Encryption & RTSP Authentication		
21	Intelligent Video	Motion Detection, Tempering/Masking, Crossing line/Tripwire, Perimeter		
22	Event Trigger	Camera tampering detection, digital input, manual trigger, motion detection, SD card full		
23	Event Action	Event notification via digital output, HTTP, FTP, SD card File upload via HTTP, FTP, SD card		
24	Alarm I/O	Minimum 1 Input & 1 Output contact for 3rd party interface		
25	Operating conditions	As per city Ambient conditions in all seasons		
26	Interface	RJ 45, 100 Base TX		
27	Humidity	Humidity 10-95% RH (condensing)		
28	Casing	IP66/IP67, IK10, NEMA 4X or higher		
29	Certification	UL 62368-1, CE, FCC, RoHS & BIS		
30	Power	PoE IEEE 802.3af/ POE+ IEEE 802.3at and 12VDC/24AC/24VDC		
31	IR illuminator	Inbuilt IR Illuminator with range of 60 meters based upon requirement of site/focus/area of interest.		

32Ch Embedded Network Video Recorder with 4 SATA Interfaces

S.No.	Parameter	Specification	Compliance (Yes/No)	Remarks
1	Operating system	Embedded Linux		
2	Video channels Support	Minimum 32 channels IP Cameras		
3	Storage	Should support 4 SATA hard disk slot and each should support 10TB HDD		
		Should support JBOD & RAID 0, 1, 5, 6, 10		
4	Image and Video specification	H.265+, H.265, H.264 compression		
		Video Input – 32 IP camera minimum		
		Video Resolution support: 8MP/6MP/5MP/4MP/3MP/1080P/UXGA/720P/VGA /4CIF/DCIF/2CIF/CIF/QCIF		
		Adjustable Image Quality		
		VBR and CBR support		
		Each channel should support multi-level motion detection		
		Matrix Display: 1/3/4/6/8/9/10/13/16/20/25/32 OSD Display		
5	Physical Ports	Video Output: 1ch VGA and 1ch HDMI		
		Audio Interface: 1ch In & 1ch Out		
		Network: 1 RJ45, 10M/100M/1000M LAN port		
		USB Port: 2# USB2.0 ports		
6	Recording and playback	Should support schedule, motion and alarm-based recording		
		Synchronous Playback		
		Time/Date based search mode		
		Alarm based search		
7	Alarm	VCA detection alarm should be supported		
8	Network Protocols	IPV4, IPV6, TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, NFS, DHCP, DNS, DDNS, RTP, RTSP, RTCP, RTMP, PPPoE, NTP, UPnP, SMTP, IGMP, Multicast, ARP, SNMP, SSL		
9	Backup	Should Supports data transfer via USB & Network for easy and fast backup of data.		
10	General	Support megapixel HD network video preview, storage and playback		
		Digital Zoom support on any user specified area in live screen		
		Should support digital zoom in both Live and Playback		
		Should support Playback and backup based on event search		

11	User Interface	Internet Explorer 6.0 or later		
		Multiple Language GUI		
		Iphone, Android Phone Support		
12	Operating Temperature	AC 110-240V/ DC 12-48V Supply or OEM should give appropriate power supply		
		Operating: -10° to +50° C		
		Humidity: 10% to 90% (non-condensing)		
13	Certifications	UL 62368-1, CE, FCC, RoHS & BIS		
14	Compatibility	All the cameras and NVR from Same OEM		

1. 8 Port L2 Managed PoE Switch

Features	Specification	Compliance Yes/No
Hardware	8 x 10/100/1000 PoE Ports with 2 x 10/100/1000 SFP Uplink + 1 Console Port	Yes
Standard Network Protocols	IEEE 802.3 af (PoE), IEEE 802.3at (PoE Plus), IEEE 802.3ad Trunking (LACP), IEEE 802.3x full-duplex flow control, IEEE 802.1p Class of Service, IEEE 802.1X Radius network access control	Yes
Forwarding mode	Store-and-forward switching	Yes
MAC address Table	8 K	Yes
Switching capacity Non-Blocking	20 Gbps or more	Yes
Packet forwarding Rate	14.9 Mpps or more	Yes
Packet Buffer Memory	4K	Yes
Jumbo Frame	10240 Bytes	Yes
PoE power budget	120W	Yes
Quality of Service (QoS)	Support 802.1p CoS/DSCP priority Support 4 priority queues, Queue scheduling: SP, WRR, SP+WRR Port/Flow-based Rate Limiting	Yes
L2 Features	IGMP Snooping V1/V2/V3 802.3ad LACP (Up to 8 aggregation groups, containing 8 ports per group), Spanning Tree STP/RSTP/MSTP Port isolation BPDU filtering/guard TC/Root protect, Loop back detection, 802.3x Flow Control	Yes
VLAN	Supports up to 4K VLANs simultaneously (out of 4K VLAN IDs) Port/ MAC/Protocol-based VLAN	Yes
Access Control List	L2~L4 package filtering based on source and destination MAC address, IP address, TCP/UDP ports, 802.1p, DSCP, protocol and VLAN ID; Time Range Based	Yes
Security	IP-MAC-Port-VID Binding, IEEE 802.1X Port/MAC Based authentication, Radius, Guest VLAN, DoS Defence, Dynamic ARP inspection (DAI) SSH v1/v2, SSL v2/v3/TLSv1 Port Security, Broadcast/Multicast/Unknown-unicast, Storm Control	Yes

Management	Web-based GUI and CLI management, SNMP v1/v2c/v3, compatible with public MIBs DHCP/BOOTP Client, DHCP Snooping, CPU Monitoring, Port Mirroring Time Setting: SNTP Integrated NDP/NTDP feature Firmware Upgrade: TFTP & Web System Diagnose: VCT SYSLOG & Public MIBS	Yes
Temperature	Operating: 0°C to 40°C, Storage -40° to 70°C	Yes
Warranty	3 Year's	Yes
CERTIFICATION	CE, FCC, ROHS (Relevant documents to be provided)	Yes

2. 24 Port Managed Switch with 10G Uplink		
Features	Specification	Compliance Yes/No
Port	24 x 10/100/1000Base-T + 4 x1/10GE(SFP+) Auto-MIDX	Yes
Management Port	1x Console port, 1x USB2.0 interface, 1x Reset key	Yes
Switching Capacity	128 Gbps	Yes
Forwarding Rate	95 Mpps	Yes
MAC Address	16K	
Jumbo Frame	10K	Yes
Queues per port	8	Yes
VLAN Table	4K	Yes
L2 Ring Protection	MRPP, ITU-T G.8032, Loopback Detection, Fast Link	Yes
L3 Features	Should be Static Routing, PBR	
Spanning Tree	802.1D STP, 802.1W RSTP, 802.1S MSTP, Root Guard, BPDU Guard, BPDU Forwarding, TCN filtering	Yes
VLAN	Port based VLAN, IEEE802.1Q, Private VLAN, Voice VLAN, MAC VLAN, Normal QinQ, Selective QinQ, Flexible QinQ, VLAN Translation, N:1 VLAN Translation	Yes
Quality of Service (QoS)	8 Queues Per Port, Bandwidth Control, Flow Redirect, ACL, VLAN ID, COS, TOS, DSCP, WRR, SWRR, WDRR for Scheduling Match the IP Fragmentation	Yes
Security	IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL Time Range ACL, ACL rules can be configured to port, VLAN Storm Control based on packets Port Security, MAC Limit based on VLAN and Port Anti-ARP-Spoofing, Anti-ARP-Scan, ARP Binding ND Snooping, DAI, IEEE 802.1x Authentication, Authorization, Accounting Radius, TACACS+	Yes
Management	TFTP/FTP, CLI, Telnet, Console Web/SSL (IPv4/IPv6) SSH (IPv4/IPv6), SNMPv1/v2c/v3, SNMP Trap Public & Private MIB interface RMON 1,2,3,9. Ping, Trace Route, Radius Authentication Syslog (IPv4/IPv6), SNTP/NTP (IPv4/IPv6) Dual IMG, Multiple Configuration Files Port Mirror, RSPAN, sFlow OAM EFM, VCT, DDM, ULDP, LLDP/LLDP MED	Yes
Temperature	Operating 0°C to 50°C, Storage -40°C to 70°C	Yes
Power Consumption	20W, Fanless Green Energy	Yes

Warranty	3 Year's	Yes

	Outdoor F/O Cable, Loose Tube, SM, 6/12 Fibers, Central Steel Wire+Corrugated Steel, PE	Compliance (Yes/ No)
1	Should fulfill the requirements of ISO.IEC 11801 - 2nd Edition, type OS2, ITU-T REC G 652D spec IEC 60794-1-2 F5	
2	Fibre Count: 6 /12, Fiber count per tube :6 / 12, Filler count :4	
3	Filler Material: PP	
4	Max. Attenuation: At 1310 nm <= 0.36 dB/km, At 1550 nm <=0.22 dB/km	
5	Fibre/Tube Identification: Multi Tube	
6	Fibre protection (Tubes) : Polybutylene Terephthalate (PBT)	
7	Armouring: CST	
8	Thickness: 1.6mm	
9	Outer Sheath: UV Stabilised Polyethylene (PE)	
10	Central Strength Member: Steel wire coated with PE	
11	Mass (Nominal) : 91 kg/km	
12	Max. Tensile Strength-Short Term: 1500N, Max. Crush Resistance-Short Term : 2200N/100 mm	
	Fiber Optic LIU Rack Mount LIU (24 Fiber Port and 12 Fiber Ports)	Compliance (Yes/ No)
1	Fiber optic patch panel: Fiber optic patch panel FMS Termination Drawer should have sufficient slots to accommodate 3 of 12/16 Port LC Adaptor Plates.	
2	Should have Slide type drawer structure. Splice Tray: Splice Tray of ABS, Comply with UL 94V2 material should be supplied with LIU.	
3	Height: 1 U, 1.75 inches (12 and 48 Ports)	
4	Material: Cold Rolled Steel in surface coated by electrostatic epoxy powder	
	12/16 Port LC/SC Type Adaptor Plates (Single mode)	Compliance (Yes/ No)
1	Port Density :12/16 LC/SC Single mode Ports	
2	All LC adapters should be duplex type with shutter for protection. Adapters should be snap mount for easy insertion and removal.	
3	Insertion Loss: <0.2 to <0.1 dB	
4	Compliance: RoHS Compliant	
	Patch Cord, LC, Duplex, SM, G657A2, PC, LSZH	Compliance (Yes/ No)
1	Cable: LC-LC 9/125µm OS2 Single mode Duplex Patch Cord Length: 3mtrs	
2	Connectors: The optical fiber patch leads shall comprise of Single mode 9/125µm fiber with 2XLC type fiber connectors terminated at each end of fiber patch cord.	
3	Jacket Material: LSZH complying to IEC 61034-1 & 2,IEC-60332-1, IEC-60754-1 & 2	
4	Attenuation: 1310/1550 : 0.36/0.22 dB/KM	
5	Connector Loss: 0.30dB(max)	
6	Operating Temperature: -40°C to +75°C	
	DIN Rail Mount LIU for Junction Point	Compliance (Yes/ No)
1	DIN Rail Mount LIU should have High quality cold rolled steel plate and electrostatic powder spraying on surface. Dimensions: 210"44"150 mm(H.W.D)	
2	It should have Guide rail buckle material nylon 66.	
3	RoHS Compliant	

4	It should come with Splice protection sleeve - 12 nos and Nylon cable ties - 10 nos.	
5	It should have provision for SC/ST/LC with same dimension.	
	Cat 6 FUTP LSZH Cable	Compliance (Yes/ No)
	4 Pair Cable with integral cross -member pair separator for uniform characteristic impedance. Category 6 Unshielded Twisted 4 Pair 100 Ω cable shall be compliant with ANSI/TIA/EIA-568-D-2018 Additional ISO/IEC 11801-1 and ISO/IEC 61156-5	
	Suitable for 10GBase-T applications in acc. with IEEE 802.3an up to 500 MHz and 55 m.	
	Transmission Performance Specification for 4 Pair 100Ω an guaranteed up to 1G	
	Category 6 FUTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, UTP CM cable jacket.	
	Conductor: Solid Copper, Conductor Diameter: 0.555mm (23AWG)	
	Insulator HD Polyethylene solid	
	Jacket: LSZH RoHS IEC60332-1-2, IEC 61034-2, IEC 60754-1&-2 complied, Color- Grey	
	Outer Diameter: 7.2+/- 0.4mm	
	Max Temperature: -20°C to +75°C	
	Mechanical Test	
	Should have Pulling force of 100N.	
	Bend Radius: Installation: <4 X Cable Diameter at -20°C ±1°C, Operation: <4 X Cable Diameter at -20°C ±1°C	
	Electrical Test	
	D.C. Resistance Conductor ≤9.6Ω/100m	
	Resistance Unbalance: <2 %	
	Mutual Capacitance < 5.6 nF/100M	
	Capacitance Unbalance < 160 pF/100m	
	Propagation Velocity : 65%	
	Cat 6 STP RJ 45 Keystone Jack	Compliance (Yes/ No)
	RJ45 Jack of Category 6, for the establishing of transmission channels of class E with up to 4 plugged connections, complies with Category 6 requirements of the standards ISO/IEC 11801:2nd edition, EN 50173-1, DIN EN 50173-1: 2002 as well as ANSI/TIA/EIA 568-B.2-1, de-embedded tested in acc. with IEC 60603-7 (603-7), interoperable and backwards compatible with Cat.5e and Cat.5.	
	Suitable for 10GBase-T applications in acc. with IEEE 802.3an up to 500 MHz and 55 m.	
	Compatible with RJ standard plugs (RJ11, RJ12, RJ45), PCB- and simple tool based connection of installation cables AWG 24 – 22 (0.5 mm – 0.65 mm) and flexible cables AWG 26/7 – AWG 22/7.	
	IDC termination should feature nil crossover in acc. with EIA/TIA 568-A/B, gold-plated bronze contacts for >750 mating cycles, >200 insertion cycle	
	Material: RoHS complied	
	Housing material: Polycarbonate (UL-94-V0)	
	Should be available with or without dust protection feature	
	Patch Cord, S/FTP 4P, Cat.6, length 1/3	Compliance (Yes/ No)
	Standardization: Compliant with Cat.6, Class E requirements: ISO/IEC 11801 2nd Edition Compliant with Cat.6 component standards IEC 60603-7-4 and 60603-7-5	

	Cable shield: Tinned-copper braid	
	Number of conductors : 8	
	Stranding: 7 x 0.16 mm (26 AWG)	
	Cable jacket characteristics: cable CM	
	Cable overall diameter: 6.0 ± 0.2mm max.	
	Tube / Wire type: stranded conductor	
	Insulation: solid polyolefin, 0.97±0.02 mm diameter	
	Plug: Feature cable retention, with enhanced pull strength. The plug is designed to ensure precision wire placement, providing superior performance.	
	Cat 6 patch cord plug to have round cable holder and strain relief boot to avoid bending.	
	Jacket: PVC/LSZH with 8 different color options	
	Plug should be featured with color ring options	
	Plug should have high repeatability cross talk performance	
	Plug design should be patented with unique feature	
	Should be ETL verified; 4 Channel ETL certificate should have part code mentioned	
	Cat6 Shielded Field Termination Plug	Compliance (Yes/ No)
	Standardization: Compliant with Cat.6A, Class EA requirements: ISO/IEC 11801 2nd Edition backward Compliant with Cat.6 component standards IEC 60603-7-4 and 60603-7-5	
	Cable: UTP/STP	
	Number of conductors : 8	
	Termination: IDC type Tool less	
	RJ45 Plug Metal covers: Zinc die-casting with nickel plated	
	RJ45 Plug contacts: Phosphor bronze with nickel plated	
	Plastic Wire Organizer: PC, Color: White, UL 94V-0	
	IDC Durability: ≥20 Termination cycles	
	RJ45 Jack Durability: ≥750 Plug-Jack mating cycles per IEC 60603-7-81	
	Operating Temperature: -10 degree C to +60 degree C	
	Patch Cord retention strength: 7.7 Kg Max. according to IEC 60603-7-5	
	Rj45 Plug Insertion force: 3.1 Kg Max according to IEC 60603-7-81	
	12F Joint Enclosure	Compliance (Yes / No)
1	Joint enclosure should have Reusable Mechanical seal which make maintenance and capacity increasing more convenience	
2	Joint Enclosure should have Straight-through, branching, splitter, splicing and adaptation	
3	It should Constructed of non-corrosive materials	
4	Bending radius of fibers should be in any place is greater than 30mm	
5	It should have Stackable splice tray, easy open and maintenance	
6	Dimension: D230mm x H435 mm	
7	Cable diameter Ø10- Ø17.5 mm dia.	
8	Cable ports : 1 uncut (Straight-through) input cable hole and 4 branching holes, Total 6 Ports	
9	Impact: The energy is 16Nm, after 3 cycles, the tightness should be ok.	

TECHNICAL SPECIFICATION FOR 1 KVA ONLINE UPS Systems with 30Mins back up

SI No	Technical Parameters		
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**SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF
IP BASED CCTV SYSTEM AT HOOGHLY RIVER BRIDGE**

1	UPS Capacity	1 kVA UPS System (1Ph Input /1Ph Output)	Compliance	Remarks
2	Topology	True On-line Double Coverstion UPS		
3	Output power capacity	800 Watt		
4	Input			
4.1	Voltage Range	110 - 300 VAC based on the load percentage		
4.2	Frequency	50 Hz		
	Frequency Range	45 to 55 Hz		
4.3	Power Factor	Unity		
4.5	Current THD	< 5%		
5	Output			
5.1	Voltage	230 VAC		
5.2	Voltage Regulation	+ / - 1%		
5.3	Frequency (Free Running Mode)	50 Hz ± 0.1 Hz		
5.4	Frequency (Synchronisation Mode)	45 to 55 Hz		
5.5	Harmonic Distortion (THD)	≤ 2% (linear load) ≤ 5% (non-linear load)		
5.6	Output Waveform	Sine wave		
5.7	Crest Factor	3:1		
5.8	Inverter Efficiency	≥ 90%		
5.9	Power Factor	0.9 Lagging		
5.10	Overload	101% - 109% for 5 minutes 110% - 129% for 1 minute 130%-150% for 10 Sec		
5.11	System DC Voltage	≥36 VDC		
6	Battery			
6.1	Battery Type	12 V Sealed Lead Acid Maintenance Free		
6.2	Battery make	Exide/ quanta		
6.3	Battery charging	Constant Current & Constant Voltage		
6.4	Back up time	30 Mins Backup		
6.5	Charger	Built-in solid state float-cum-equalizing charger with automatic boost / trickle charge modes with current limiting features.	1008	
6.6	VAH Required	≥ 1008		
7	Efficiency			
	AC/AC (overall efficiency)	≥ 85% (at full Load)		
8	Features			
8.1	Eco mode	Available		
8.2	Overload capacity	Available		
8.3	Converter mode	Available		
8.4	Bypass parameters configurable	Available		

8.5	Display	LCD Display		
9	Mechanical			
	Ingress protection	IP 20		
10.6	Bypass	Static Bypass		
10.7	Maintenance Bypass	Available		
12	Certifications			
12.1	ISO 9001 : 2008			
12.3	ISO 14001 : 2004			
12.4	BIS Certificate			
12.5	PEP Certificate			

TENDER SPECIFICATION FOR 1000 VA LI UPS (168 VAH)				
S.NO	DESCRIPTION	SPECIFICATION	CONFIRMATION (YES / NO)	Remarks
1	MAKE			
2	MODEL	1000 Plus V		
	Rating(VA/Watts)	1000VA / 600Watts		
3	INPUT	1 Phase, 230 VAC		
	Input Voltage Range	140V - 300 VAC		
	Input Frequency	50Hz		
4	OUTPUT	1 Phase, 230 VAC		
	Output Volts Range	195V - 255V AC (Mains Mode)		
		230V±10% (Battery Mode)		
	Transfer Time	4ms - 10ms typical		
	Output Frequency	50Hz +/-1 Hz (Battery Mode)		
	Output Wave form	Stepped Sinewave		
	Inverter Efficiency	> 60 %		
5	BATTERY			
	Battery	12 V SMF 7 AH - 2 Nos (inbuilt)		
	System Voltage	24 V DC		
	Recharge time	8 hrs for 90% charging		
6	INDICATION & PROTECTION			
	Front Display	LED		
	Indication	AC Mode - Green Light		
		Backup Mode - Yellow flashing		
		Fault - Red lighting		
	Alarm	Battery Mode - Every 10 Second		
		Low Battery - Every Second		
		Over load - Every 0.5 Second		
		Fault - Continuously sounding		
	Night guard protection	Required		

	Protection Features	Mains Ac Input Low / High, Battery mode Input Low / High, Short circuit trip - Mains / Battery, Over load Trip - Mains / Battery mode		
	Input Protection	Resettable Circuit Breaker		
8	CONNECTION			
	Input Type	1.5 meter Power Chord		
	Output Type	4 Nos - 5 Pin Indian Socket		
7	PHYSICAL			
	Dimension(W X D X H) mm	140x368x180		
	Weight	14		
9	ENVIRONMENTAL			
	Relative Humidity	0-95% without condensation		
	Operating Temperature	0 - 40 degC		
	Noise Level	< 40 dB at 1 meter distance		
10	FEATURES			
		Microprocessor based design for High reliability		
		Auto Restart Facility		
		Generator Compatibility		
		Cold Soft		
		Double Boost & Single Buck AVR		
11	STANDARDS			
	IS 16242 (PART 1) : 2014	Required		
	Performance Test Report	Required from NTH (National Test House)		

Warranty: 3 years onsite comprehensive