

Government of West Bengal
Office of The Addl. Director General & Inspector General of Police
Telecommunication, West Bengal
3 Manik Bandyopadhyay Sarani, Tollygunj, Kolkata 700 040
Phone: 033-23770400/1701, Fax: 033-23110651, e-mail: telecomhqs@gmail.com

Notice Inviting e-Tender No. WBPTel/ADG/eNIT- 13/Wireless Stores/2019-20

Date: 01-08 - 2019

The Add. Director General & Inspector General of Police, Telecommunication, West Bengal invites e-Tenders on behalf of Home Department, Government of West Bengal from the bonafide manufacturers/dealers or distributors/traders & Industrial undertaking organization etc. who has tender specific authorization (desirable) for the item in the table below:-

Sl.	Items	Qty	Specification
1.	4.0 Megapixel HD Network IR 50M Bullet Camera	170 Nos	As per Annexure - IV (Page 10 to 16)
2.	4.0 MP HD Network High Speed Dome PTZ Camera	70 Nos	
3.	Embedded HD 16 Channel Network Video Recorder	100 Nos	
4.	Embedded HD 32 Channel Network Video Recorder	10 Nos.	
5.	Surveillance HDD 4 TB 7200 rpm (make: Seagate)	300 Nos	
6.	CAT6 Cable (make D-Link/Digilink)	75000 metres	
7.	Unarmoured CSTA9 Micrometer Single channel OFC (4 core)	75000 metres	
8.	Armoured CSTA9 Micrometer Single channel OFC (4 core)	20000 mtrs.	
9.	HD IPS 22 Inch LED Monitor (make LG)	80 Nos	
10.	HD IPS 32 Inch LED Monitor (make LG)	10 nos.	
11.	HD IPS 42 Inch LED Monitor (make LG)	10 nos.	
12.	8 Port Switch 10/100 Mbps (make D-Link)	300 Nos	
13.	16 Port Switch 10/100/1000 Gbps (make D-Link)	50 Nos	
14.	RJ 45 Connector Make: D-Link	10000 Nos.	
15.	Power cable, 5A (make: Finolex)	10000 metre	
16.	Spike Guard, 5 way American Socket with Switch Make: Anchor	300 Nos.	
17.	Ethernet Mbps Media converter 10/100 (Optical fibre Network and vice-versa) Make : i-ball	200 pairs	
18.	Ethernet Gbps Media converter 10/100/1000 (Optical fibre Network and vice-versa) Make : i-ball	30 nos.	
19.	3Pin power supply female socket, 5 A (make: Anchor)	500 nos.	
20.	2 pin male plug, 5 A (make: Anchor)	500 nos.	
21.	American socket, 5A	200 nos.	
22.	PVC conduit pipe , 20 mm dia	1000 mtrs.	
23.	PVC flexible conduit pipe, 20 mm dia	500 mtrs	
24.	Pig Tail 2 m length	500 nos.	
25.	OFC Junction Box	500 nos.	
26.	Outdoor metal Box (14"x10"x10") gauge 20	300 nos.	
27.	Wooden extension Board with 5 nos. Anchor make 5A power socket	100 nos.	
28.	Cat 6 patch chord of 2 m length (make: Dlink)	500 nos.	
29.	Splicing machine (make: Fujikura)	1 no.	
30.	OTDR (Optical Time Domain Reflectometer)	1 no.	
31.	UPS 650 VA (make: Microtek)	50 nos.	
	EMD Rs. 5,00,000/-		

ELIGIBILITY OF BIDDERS:

Only Manufacturers/Direct Importers/Dealers having the Tender specific authorization from OEM (Original Equipment Manufacturer) are eligible for participation in the Tender.

The event of e-filing, intending bidder may download the Tender documents from the Web Page Links "wbtenders.gov.in/nicgep/app" or "policewb.gov.in/wbp/tender.php" directly with the help of Digital Signature Certificate. **Earnest Money Rs. 5,00,000.00 (Rupees Five Lakh) only have to be remitted through online. No alternative will be accepted. Necessary Earnest Money will have to be deposited by the bidder electronically: online - through his net banking enabled bank account, maintained at any bank.** Bidders will get the Beneficiary details from e- tender portal with the help of Digital Signature Certificate and may transfer the EMD from their respective Bank as per the Beneficiary Name & Account No., Amount, Beneficiary Bank name (ICICI Bank) & IFSC Code. Bidders are also advised to submit EMD of their bid, at least 3 working days before the bid submission closing date as it requires time for processing of Payment of EMD. Bidders eligible for exemption of EMD as per Govt. rule may avail the same and necessary documents regarding the exemption of EMD must be uploaded in the EMD folder of Statuary bid documents.

2. Financial Bid is to be submitted online (both words & figures) concurrently duly digitally signed in the website: <https://wbtenders.gov.in> as per Date & Time schedule stated in Clause 11.

3. (a) A tender Bidder, after being accepted by the undersigned authority, shall be liable to supply all the items in question as per the accepted rate, for a period of one year from the date of acceptance, without any hike in the prices, whatever are the circumstantial criteria thereby.

(b) Conditional/incomplete bid will not be considered.

(c) The Bidder should quote rate for all the items mentioned in the above table considering Clause 10 also, failing which his tender will be treated as incomplete and will be cancelled.

(d) Tenderers should specify the address within the City of Kolkata and Phone/Mobile, Fax No./e-mail I.D. for the purpose of quick communication in the event of urgency.

(e) Deviation Statement (if any) may also be enclosed.

(f) There should be an on site manufacturing guarantee/warranty as per OEM for the item with a mention of specific period.

4. The selected bidders shall have to deposit 5% security deposit of the total contract value of the items in favour of the Additional Director General & Inspector General of Police Telecommunication, West Bengal in G P Notes/ Bank Guarantee Bond/F.D.R. of any nationalized bank and to execute an agreement of contract within 3 (three) days from the date of issue of the work order failing which the letter of acceptance, so issued, may be treated as cancelled as well as the earnest money so deposited may be forfeited and the firm may be blacklisted. No interest would be paid on the performance Security Deposit. Payment will be made as and when fund will be available from the concerned source subject to complete supply of articles.

5. Orders for the supply of the approved products will be placed with the successful tenderers after the execution of the agreements, and such supply shall have to be made in such installments as may be fixed or spread over the period to be specified in the supply orders to be made in pursuance of the agreements. The successful tenderer will have to supply within the specified time schedule that had been assured at the time of selection as supplier.

6. Tender Specific authorization Certificate of OEM (Original Equipment Manufacturer) is desirable.

7. It should be noted that the firm/firms will be selected purely on a "PROVISIONAL BASIS" and the forecast requirement may increase or decrease by any quantity during the period of validity of the tender.

8. Addl. Director General & Inspector General of Police, Telecommunication, West Bengal reserves the right to reject any/or all the tendered rates without assigning any reason and not to place any orders even after selection and is not liable for any cost that might have incurred by any bidder at the stage of bidding and also reserves the right to, divide the contract amongst any number of tenderers, if required so.

Addl. Director General & Inspector General of Police Telecommunication, West Bengal does not bind himself to accept the lowest rate.

9. Selected bidders will have to supply articles according to the indents placed with them from time to time within the specified period as per approved sample and/or the product demonstrated for inspection and evaluation, failing which the firm may be blacklisted with the forfeiture of security deposit. In the event of the non-supply of articles or if articles supplied by the selected contractors) is found to be sub-standard, the Addl. Director General & Inspector General of Police Telecommunication, West Bengal may (without notice to the contractors) purchase from elsewhere the articles required. Any loss incurred by reason of the price paid for such article(s) or any other loss or expense incurred by reason of such default on the part of the contractors may be deducted from the bills or any money payable to the contractors or from the security deposit of the concerned contractor(s). If the performance of the supplied items/equipment are found unsatisfactory or not as to our desired level even after payment, the supplier has to refund the entire amount paid to him earlier for that particular item/equipment.

10. All the product as shown in the previous page should have CE,FCC,UL certificates.

11. The bidders should confirm the availability of the Cloud Server of their NVR/Camera in the Technical Bid..

12. **DATE & TIME SCHEDULE:**

SI. No.	Particulars	Date & Time
1	Date of uploading of NIT Documents (Online)	01-08-2019 at 1800 hrs
2	Documents download/Sell Start date (Online)	01-08-2019 at 1800 hrs
3	Date of hoisting of documents at Departmental Website "policewb.gov.in"	03-08-2019 at 1600 hrs
4	Bid submission start date (Online)	01-08-2019 at 1800 hrs
5	Pre Bid Meeting	08-08-2019 at 1100 hrs
6	Bid submission closing date (Online)	22-08-2019 at 1400 hrs
7	Last date of submission of Earnest Money Deposit (Online)	22-08-2019 at 1200 hrs
8	Technical Bid opening (Bid A)	28-08-2019 at 1400 hrs
9	Date of uploading list of technically qualified bidders	To be notified later
10	Date for opening of Financial Proposal (Bid B) (Online)	To be notified later
11	Date of uploading list of bidders along with the approved rates	To be notified later

13. **Bid opening Location:** Office of the Director General & Inspector General of Police, Telecommunication, West Bengal, 3 Manik Bandyopadhyay Sarani, Tollygung, Kolkata 700 040.

14. Canvassing on the part of tenderers will render his tender to cancellation summarily.

15. **For any clarification and collection/verification of sample regarding Specifications of the Tender, Tenderers are requested to contact with O/C CCTV or DySP (Technical) , Telecommunication Hqrs., 3 Manik Bandyopadhyay Sarani, Tollygunj, Kolkata 700 040.**

16. There must be a demo of the offered products after opening the Technical Bid.

NB: Any inconsistencies in the descriptions may be expeditiously brought to the notice of the Tendering authority.

INSTRUCTIONS TO BIDDERS

GENERAL GUIDANCE FOR e-TENDERING:

Instructions/ Guidelines for electronic submission of the tenders have been annexed for assisting the contractors to participate in e-Tendering.

I. REGISTRATION OF THE CONTRACTOR:

Any contractors 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://wbtenders.gov.in> (the Web Portal of Public Works Department) the contractor is to click on the link for e-Tendering site as given on the web portal.

II. DIGITAL SIGNATURE CERTIFICATE (DSC):

Each Contractor is required to obtain a Class-II OR Class-III Digital Signature Certificate (DSC) for submission of tenders for the approval service of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the website stated in Clause-I above DSC is given as a USB e-Token.

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

IV. SUBMISSION OF TENDERS:

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

V. PENALTY CLAUSES:

PENALTY FOR FORMATION OF CARTEL OR FURNISHING OF FRAUDULENT / MISLEADING DOCUMENTS:

If during the tender process or at any state during the validity of the tender period, it is found that a Tenderer(s) has formed a cartel in what so ever form or name to fix up the rates or suppliers to the detriment of the fairness of the tender process, penal measures shall be initiated. Similar penal measures shall also be initiated against those tenders who have submitted false / misleading / fraudulent documents or made incorrect declarations. The penal measure will be forfeiture of Earnest Money, Forfeiture of Performance Bank Guarantee if enlisted as a supplier.

- VI. (i) Accepted Materials should be supplied within 10 (ten) days after getting supply order.**
- (ii) Order will be placed on availability of fund.**

VII. TECHNICAL PROPOSAL:

The Technical proposal should contain scanned copies of the following in two covers (folders).

(a) Statutory Cover containing the following documents:

- (1) NIT (2) EMD (3) AGREEMENT PAPER (AS ANNEXTURE-III) (4) TECHNICAL SPECIFICATIONS & WARRANTIES AS PER OEM

(b) Non-statutory Cover containing the following documents:

THE ABOVE STATED NON-STATUTORY/TECHNICAL DOCUMENTS SHOULD BE ARRANGED IN THE FOLLOWING MANNER:-

Click the check boxes beside the necessary documents in the My Document list and then click the tab "Submit Non Statutory Documents" to send the selected documents to Non-Statutory folder.

Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents.

SI. No.	Category Name	Sub-Category Description	Detail(s)
A	Certificate(s)	Certificate(s)	GST Registration, Trade License, Income Tax/PAN, Letter of Authorization/DPL (Dealer Possession License)/ OEM (Original Equipment Manufacturer), Latest P.Tax (Challan).
B	Company Detail(s)	Company Detail	Proprietorship Firm (Trade License) Partnership Firm (Partnership Deed, Trade License), Ltd. Company (Incorporation Certificate, Trade License) Society (Society Registration Copy, Trade License) Power of Attorney.
C	Credential	Credential - 1	Similar nature of work done & completion certificate, which is applicable for eligibility in this tender.
D	Returns	Income Tax	Last 3 Financial Year's of Income Tax i.e. for 2015-16 2016-17 & 2017-18

I. FINANCIAL PROPOSAL:

- (a) The contractor is to quote the rate for all the items online through computer in the space marked for quoting rate in the BOQ (Bill of Quantities). *The Quoted Rate should not be higher than printed MRP.*
- (b) If any contractor is exempted from payment of EMD, copy of relevant Government Order needs to be furnished.
- (c) The financial proposal should contain the following documents in one cover (folder) i.e., BOQ (Bill of Quantities).
- (d) Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor. 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.

OPENING & EVALUATION OF TENDER:

1. Opening of Technical Proposal: A Committee comprising of Superintendent of Police, Deputy Superintendent of Police, and a team of Technical officers of Telecommunication West Bengal will open the Technical bid of the Tender.
2. Intending Tenderers may remain present if they so desire.
3. Cover (folder) for Statutory Documents will be opened first and if found in order, cover (folder) for Non-Statutory Documents will be opened. If there is any deficiency in the Statutory Documents the tender will summarily be rejected.
4. Decrypted (transformed into readable formats) documents of the non- statutory cover will be downloaded & handed over to the Tender Evaluation Committee.
5. Summary list of technically qualified tenderers will be uploaded online.
6. 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.
7. During evaluation, the committee may summoned of the Tenderers and seek clarification/information or documents or original hard copy of any of the documents already submitted and if these are not produced within the stipulated time frame, their proposals will be liable for rejection.
8. Bidders should participate for all the 31 items as mentioned in the table in 1st paragraph of this NIT. Financial Evaluation will be done on the combined rates for the total items and L1 will be selected as a summation of SI No. 1 to 31 as mentioned in NIT.

II. REJECTION OF BID:

The Addl Director General & Inspector General of Police Telecommunication, West Bengal reserves the right to reject any/or all the tendered rates without assigning any reason and not to place any orders even after selection and is not liable for any cost that might have incurred by any bidder at the stage of bidding and also reserves the right to divide the contract amongst any number of Tenderers if required so and to place order for more or less than the quantity mentioned in the forecast requirement. The Addl Director General & Inspector General of Police, Telecommunication, West Bengal does not bind himself to accept the lowest rate.

III. 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 both online & offline to save time. The notification of award will constitute the formation of the Contract. The Agreement in prescribed format in admissible stamp duties will incorporate all agreements between the Tender Accepting Authority and the successful bidder/bidders. The time frame for attending the fault and restoration of equipment within the warranty period and penalty clause for the defaulters will be included in the agreement. All the tender documents including N.I.T. & B.O.Q. will be the part of the contract documents. After receipt of Letter of Acceptance, the successful bidder

shall have to submit requisite copies of contract documents downloading from the website stated in the N.I.T. along with requisite cost through Demand Draft issued from any nationalized bank in favor of Director General & Inspector General of Police Telecommunication, West Bengal for the concerned work within time limit to be set in the letter of acceptance.

Payment Terms: After receipt and satisfactory testing of the equipment.

IV. VALIDITY PERIOD:

The contract period will be up to September, 2020.

Sd/-
Addl. Director General &
Inspector General of Police
Telecommunication, West Bengal

FORMAT FOR CHECK LIST

Sl.No.	Items	Pl mark ✓		Page No.
		Yes	No	
1	Application submitted in Annexure - I	Yes	No	
2	Annexure - II (Authorization letter of signatory from the Company)	Yes	No	
3	Annexure - III (Copy of agreement between the manufacturer and the Distributor)	Yes	No	
4	Copy of PAN Card and GST Reg. Certificate of the authorized signatory / Company	Yes	No	
5	Copy of Demand Draft/Pay order as applicable in favour of the Addl. Director General & Inspector General of Police Telecommunication, West Bengal - as Earnest Money	Yes	No	
6	Last 3 financial years' returns of Income Tax, i.e., for 2014-15, 2015-16& 2016-17	Yes	No	
7	Lead time compliance certificate from the Tenderer	Yes	No	

Annexure - I

APPLICATION FORMAT

(To be furnished in the Company's official letter pad with full Address and Contact No., etc.)

**To: The Addl. Director General & Inspector General of Police
Telecommunication, West Bengal
3 Manik Bandyopadhyay Sarani
Tollygunj, Kolkata 700 040**

Sub: NIT for Wireless Stores at Office of the Addl. Director General, & Inspector General of Police,
Telecommunication, West Bengal, 3 Manik Bandyopadhyay Sarani, Tollygunj, Kolkata 700 040.

Ref:

Sir,

Having examined the pre-qualification & other documents published in the NIT, I/we hereby submit all the necessary information and relevant documents for evaluation:

1. That the application is made by me / us on behalf of
In the capacity of.....duly authorized to submit the offer. The authorization letter from the Company is attached in Annexure II.
2. We accept the terms and conditions as laid down in the NIT mentioned above and declare that we shall abide by it for throughout the tender period.
3. We are offering rate for the following item /items and assured supply to the West Bengal Police Telecommunication, Government of West Bengal as mentioned in Page-1.
4. (a) We propose that the order and bill should be raised in our name. For liaisioning, we have appointed M/s having its office at (Address, Contact No. and e-mail address) as C&F agent /Liaisoner /Contact person/ Others (strike out whichever is not applicable) as per clause of the NIT
OR
(b) We propose that order and bill should be raised in favour of our authorized Distributor. For that purpose, we have appointed M/s having it's office at (Address with contact No. and e-mail Address) as authorized Distributor who will receive order and payment in his name on our behalf.

(c) The agreement between ourselves and the distributor/C&F/Liaisoner& other documents as prescribed is attached in annexure III .
5. In the event of being selected, supply will be made within the stipulated period excepting the condition which is beyond our control.
6. We understand that:
 - (a) Tender Selection Committee can amend the scope & value of the contract bid under this project.
 - (b) Tender Selection Committee reserves the right to reject any application without assigning any reason.

Date:-

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

Telephone No.:

Mobile No.:

e-Mail Address:

Annexure - II

Authorization letter from Company for authorized signatory.

Annexure - III

Copy of agreement signed between tenderer and the distributor etc.

Annexure – IV

(1) Outdoor 4.0 Megapixel HD Network IR 60M Bullet Camera: 170 (One hundred Seventy) nos.
SPECIFICATIONS

Feature	Specification
Image Sensor	1/3" in CMOS
Lens Type Internal/External	2.8-12 mm MFZ, DC IRIS, optical zoom
Resolution	4MP
Minimum Illumination	Color: 0.001Lux @f/1.6, B/W: 0Lux @f/1.6(IR on)
IR Distance (Internal/External illuminator)	up to 60 m
Electronic Shutter Speed	Auto/Manual, 1/3(4) ~1/100000s
Day/Night	Mechanical ICR (ON / OFF / AUTO selectable)
Noise Reduction	3DNR
Backlight Compensation	BLC,HLC, WDR ,SAC(Scene Adaptive Control)
Edge Base Storage	Micro SDXC Capacity Max 128GB
Event triggering	Motion Detection/Video Tampering/SD Card Error/SD Card Capacity Warning/Audio Detection
Video Compression	H.265+, H.265, H.264 and MJPEG bit rate control (CBR and VBR)
Video Streaming	Main stream 1080P @ 60 FPS,Sub stream D1@30FPS,Third stream 1080P @ 30FPS
Supported Protocols	HTTP; HTTPS; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS;DDNS; PPPOE; IPv4/v6/KC; QoS;UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP;SNMP
SUPPORTED WEB BROWSERS	IE11, Chrome,Firefox
Standards	ONVIF Profile S, G and Q
Cyber SECURITY	User account and password protection HTTPS, IP Filter, IEEE 802.1x, Digest authentication, User access log, TLS1.2, AES-256, SSH/Telnet closed, FTP disabled, PCI-DSS compliance, Hardware chipset for private key
Operational Temperature	(-40°C - 60°C)
Relative Humidity	Less than 95%, non-condensing
Ingression Protection (Internal/External Housing)	IP67,IK10
Power Supply	PoE+(802.3at) Class 4/12VDC/AC24V
Certificates	UL,FCC,CE (EN 50130-4)RoHS(EN50581)

(2) Outdoor 4.0 MP HD Network High Speed Dome PTZ Camera: 70 (Seventy) nos.

SPECIFICATIONS

Feature	Specification
Image Sensor	1/3-in. CMOS
Optical Zoom	30X
Lens	4.5 mm – 135 mm
Resolution	4 MP (2592 × 1520)
PAN travel	360°endless
Tilt Angle	-15° to 90°, auto flip 180°
Manual Speed	0.1° - 300°/s
Preset	300
FPS	60
Minimum Illumination	Color: 0.05 Lux at F1.6 0 Lux at F1.6 (IR on)
IR Distance	100 M
Electronic Shutter Speed	1/1 TO 1/30,000 sec
Day/Night	Auto (ICR)/Color/BW
Noise Reduction	2D/3D
WDR	120dB
Edge Base Storage	128GB SD Card
Iris	Auto/Manual
Audio	In/Out
Video Compression	H.265
Video Streaming	Triple streaming
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS,SSL, FTP,SMTP, DHCP, PPPoE, UPnP,SNMP, Bonjour, DDNS, IEEE 802.1x, QoS, NTP, IP Filter, ONVIF
Standards	ONVIF Profile S & G
Cyber SECURITY	User Accounts and Password protection, HTTPS, IP filter, IEEE 802.1x, Digest authentication, User access log.
Operational Temperature (Industrial Grade)	0°C to 70°C
Relative Humidity	Less than 90%, non-condensing
Ingression Protection	IP66
Power Supply	24 VAC, 3 A (±10%), PoE+ (802.3at) class 4
Certificates	FCC Part 15B/EN55032,UL,ROHS
Construction	Aluminum

3.Embedded HD 16 Channel Network Video Recorder for 4MP camera: 100(one hundred)nos.

SPECIFICATIONS

Feature	Specification
Operating System	Embedded LINUX
PROCESSOR	Quad-core embedded processor
ONVIF Compliance	YES
Resolution	12MP(4K),08MP,6MP,4MP,D1,CIF
Video Input Recording	16 channels at 1080p
POE (Internal/External)	16 Port
Record Bit Rate	RECORD BIT RATE
Interface	2 HDMI (1 HDMI up to 3840 ×2160); 1 VGA
Video Standard	PAL or NTSC
Video Codec	H.265/H.264/MJPEG/MPEG4
Multi-screen layout	1/4/8/9/16/25/36/64
Audio Input	1 Channel Input/1 Channel Output, RCA
Motion Detection	Support
Alarm Event	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer
Alarm/Relay Output	16/6
Internal Storage capacity	8 SATA ports; up to 64TB
Backup	USB storage device, Network download
Recording Mode	Schedule (Regular/Continuous,Motion Detection, Alarm); Manual; Stop
Search Mode	Time/Date; Alarm; Motion Detection(MD); Exact Search (accurate to a second); Smart Search
Playback	1/4/8/16 (maximum 4-ch @ 8MP,8-ch @ 4MP, or 16-ch @ 1080p simulateous playback)
Protocol Support	HTTP, TCP/IP, IPv4/IPv6/KC, UPnP,RTSP, UDP, SMTP, NTP, DHCP, DNS,IP Filter, PPPoE,DDNS, FTP, AlarmServer, IP Search, P2P
Remote Control Function	Remote configuration and firmware update via web client
User	128 user
Network Interface	RJ-45 port (10/100/1000 Mbps)
USB Interface	4 port USB
Operating Temperature	0°C ~ 55°C
Relative Humidity	10% to 90%
Power Supply	Single, 100~240 VAC, 50/60 Hz
Certificates	UL,FCC,ROHS(EN50581: 2012),EN55024: 2010+A1: 2015

4. Embedded HD 32 Channel Network Video Recorder for 4MP camera: 10 (Ten nos.)

SPECIFICATIONS

Feature	Specification
Operating System	Embedded LINUX
PROCESSOR	Quad-core embedded processor
ONVIF Compliance	YES
Resolution	12MP(4K),08MP,6MP,4MP,D1,CIF
Video Input Recording	32 channels at 1080p
POE (Internal/External)	16 Port
Record Bit Rate	RECORD BIT RATE
Interface	2 HDMI (1 HDMI up to 3840 ×2160); 1 VGA
Video Standard	PAL or NTSC
Video Codec	H.265/H.264/MJPEG/MPEG4
Multi-screen layout	1/4/8/9/16/25/36/64
Audio Input	1 Channel Input/1 Channel Output, RCA
Motion Detection	Support
Alarm Event	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer
Alarm/Relay Output	16/6
Internal Storage capacity	8 SATA ports; up to 64TB
Backup	USB storage device, Network download
Recording Mode	Schedule (Regular/Continuous,Motion Detection, Alarm); Manual; Stop
Search Mode	Time/Date; Alarm; Motion Detection(MD); Exact Search (accurate to a second); Smart Search
Playback	1/4/8/16 (maximum 4-ch @ 8MP,8-ch @ 4MP, or 16-ch @ 1080p simulateous playback)
Protocol Support	HTTP, TCP/IP, IPv4/IPv6/KC, UPnP,RTSP, UDP, SMTP, NTP, DHCP, DNS,IP Filter, PPPoE,DDNS, FTP, AlarmServer, IP Search, P2P
Remote Control Function	Remote configuration and firmware update via web client
User	128 user
Network Interface	RJ-45 port (10/100/1000 Mbps)
USB Interface	4 port USB
Operating Temperature	0°C ~ 55°C
Relative Humidity	10% to 90%
Power Supply	Single, 100~240 VAC, 50/60 Hz
Certificates	UL,FCC,ROHS(EN50581: 2012),EN55024: 2010+A1: 2015

5	Surveillance HDD 4 TB 7200 rpm (make: Seagate)	300 Nos
6	CAT6 Cable (make D-Link/Digilink)	75000 metres
7	Unarmoured CSTA9 Micrometer Single channel OFC (4 core)	75000 metres
8	Armoured CSTA9 Micrometer Single channel OFC (4 core)	20000 mtrs.
9	HD IPS 22 Inch LED Monitor (make LG)	80 Nos
10	HD IPS 32 Inch LED Monitor (make LG)	10 nos.
11	HD IPS 42 Inch LED Monitor (make LG)	10 nos.
12	8 Port Switch 10/100 Mbps (make D-Link)	300 Nos
13	16 Port Switch 10/100/1000 Gbps (make D-Link)	50 Nos
14	RJ 45 Connector Make: D-Link	10000 Nos.
15	Power cable, 5A (make: Finolex)	10000 metre
16	Spike Guard, 5 way American Socket with Switch Make: Anchor	300 Nos.
17	Ethernet Mbps Media converter 10/100 (Optical fibre Network and vice-versa Make : i-ball	200 pairs
18	Ethernet Gbps Media converter 10/100 (Optical fibre Network and vice-versa) Make : i-ball	30 pairs
19	3Pin power supply female socket, 5 A (make: Anchor)	500 nos.
20	2 pin male plug, 5 A (make: Anchor)	500 nos.
21	American socket, 5A	200 nos.
22	PVC conduit pipe , 20 mm dia	1000 mtrs.
23	PVC flexible conduit pipe, 20 mm dia	500 mtrs
24	Pig Tail 2 m length (make:	500 nos.
25	OFC Junction Box (Channel-	500 nos.
26	Outdoor metal Box (14"x10"x10") gauge 20	300 nos.
27	Wooden extension Board with 5 nos. of Anchor make 5A power socket	100 nos.
28	Cat 6 patch chord of 2 m length (make: Dlink)	500 nos.
29	Splicing machine (make: Fujikura)	1 no.
30	OTDR (Optical Time Domain Reflectometer)	1 no.
31	UPS 650 VA (make: Microtek)	50 nos.