



#### E-Tender notice for Supply and installation of CCTV Surveillance System in Hafed Corporate Office, Panchkula

HAFED an apex co-operative organization in the State of Haryana having annual turnover of approx 12,000 crore intends to invite e-tenders from the reputed OEM and OEM authorized bidders for Supply and installation of CCTV Surveillance System in Hafed Corporate Office, Panchkula. Tender documents containing terms & conditions can be downloaded from e-tendering portal https://etenders.hry.nic.in and at Hafed Website http://hafed.gov.in. The bidders can submit their tender documents through e-Tender portal as per dates given in the tender document. All bidders are required to get register on e-tendering portal & obtain Digital Signature. Technical & Financial bid will be opened at Hafed Corporate Office, Sector-5, Panchkula (Haryana). Hafed reserves the right to accept/reject any/all the tenders or increase/decrease the tendered quantity without assigning any reason.

#### MANAGING DIRECTOR HAFED: PANCHKULA

## DETAILED NOTICE INVITING TENDER

Hafed invites e-tenders for supply and installation of CCTV Surveillance System in Hafed Corporate Office, Panchkula in single stage, two cover systems. Under this process, the Technical Bid Application as well as online Price Bid shall be invited at single stage under two covers i.e. Technical Bid & Commercial Envelope. Eligibility of the Bidders will be first examined based on the details submitted online under first cover (Technical) with the request to eligibility and qualification criteria prescribed in the Tender document. The Price Bid under the second cover shall be opened for only those bidders whose Technical Applications are responsive to eligibility and qualifications requirements as per Tender document.

- 1. <u>The payment for Tender Document Fee and Processing Fee shall be made</u> by the bidders online directly through Debit Cards & Internet Banking Accounts and the payment for EMD can be made online directly through RTGS/NEFT or OTC Please refer to 'Online Payment Guideline' available at the Single e-Procurement portal of GoH (Govt. of Haryana) and also mentioned under the Tender Document.
- 2. Intending bidders will be mandatorily required to online sign-up (create user account) on the website https://etenders.hry.nic.in to be eligible to participate in the e-Tender. He/ She will be required to make online payment of required EMD in due course of time. The intended parties fails to pay EMD fee under the stipulated time frame shall not be allowed to submit his/her bids for the respective event/Tenders.
- 3. The interested bidders must remit the funds at least T+1 working day (Transaction + One Day) in advance as given under Key Dates <u>and make</u> <u>payment via RTGS/ NEFT or OTC to the beneficiary account number</u> <u>specified under the online generated challan. The intended bidder/agency</u> <u>thereafter will be able to successfully verify their payment online, and</u> <u>submit their bids on or before the expiry date & time of the respective</u> <u>events/Tenders at https://etenders.hry.nic.in</u>
- 4. The interested bidders shall have to pay mandatorily Processing Fee of Rs 1000/- and document fee of Rs. 1000/- (Non refundable) online by using the service of secure electronic gateway. The secure electronic payments gateway is an online interface between bidders & online payment authorization networks.
- 5. The Payment for Earnest Money Deposit (EMD) of Rs.10,000/- can be made by eligible bidders online directly through online system.
- 6. The interested bidders must remit the funds at least T+1 working day (Transaction + One Day) in advance before the expiry date & time of the respective events. And make payment via RTGS/NEFT to the beneficiary account number specified under the online generated challan.

Sr. No.	HAFED Stage	Party Stage	Start Date and Time	Expiry Date and Time
1	Release of Tender	-	08.11.2019 17:01 Hrs.	25.11.2019 17:00 Hrs
2	-	Downloading of Tender Document/ Online Bid Preparation and Submission of online Bid	08.11.2019 17:01 Hrs.	25.11.2019 17:00 Hrs
3		Submission of Document fee, e- Service fee (1000+1000) and EMD (10,000)	-	1.2019 )0 Hrs
4	Opening of Technical Bid	-	-	1.2019 0 Hrs.
5	Opening of Financial Bid	-	the financial	time for opening of bids would be ed separately

## Important Note:

- 1) The bidders have to complete 'Application/Bid Preparation & Submission' stage on scheduled time as mentioned above. If any bidder failed to complete his/her aforesaid stage in the stipulated online time schedule for this stage, his/her Application/bid status will be considered as 'Applications/bids not submitted'.
- 2) Bidder must confirm & check his/her Application/bid status after completion of his/her all activities for e-bidding.
- 3) Bidder can rework on his/her bids even after completion of 'Application/Bid Preparation & submission stage' (Application/Bidder Stage), subject to the condition that the rework must take place during the stipulated time frame of the Applicant/Bidder Stage.

## **INSTRUCTIONS TO BIDDER ON ELECTRONIC TENDERING SYSTEM**

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

## 1. <u>Registration of bidders on e-Procurement Portal</u>:

All the bidders intending to participate in the tenders process online are required to get registered on the centralized e-Procurement Portal i.e. **https://etenders.hry.nic.in** Please visit the website for more details.

#### 2. <u>Obtaining a Digital Certificate:</u>

- 2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.
- 2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details please visit the website https://etenders.hry.nic.in
- 2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from.
- 2.4 The bidder must ensure that he/she comply by the online available important guidelines at the portal https://etenders.hry.nic.in for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.
- 2.5 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised to keep a backup of the certificate and also keep the copies at safe place under proper security (for its use in case of emergencies).

- **2.6** In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate/power of attorney /lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.
- 2.7 In case of any change in the authorization, it shall be the responsibility of management/ partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person/ user on behalf of the firm/ company. The procedure for application of a digital certificate however will remain the same for the new user.
- **2.8** The same procedure holds true for the authorized users in a private/ Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

## 3. <u>Pre-requisites for online bidding:</u>

In order to operate on the electronic tender management system, a user's machine is required to be set up. A help file on system setup/Pre-requisite can be obtained from NIC or downloaded from the home page of the website - https://etenders.hry.nic.in The link for downloading required java applet & DC setup are also available on the Home page of the e-tendering Portal.

#### 4. Online Viewing of Detailed Notice Inviting Tenders:

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal e-Procurement system on the Home Page at https://etenders.hry.nic.in

#### 5. <u>Download of Tender Documents</u>:

The tender documents can be downloaded free of cost from the e-Procurement portal https://etenders.hry.nic.in

#### 6. Key Dates:

The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

# 7. <u>Online Payment of Tender Document Fee, Processing fee & EMD fees &</u> <u>Bid Preparation & Submission (Technical & Commercial/Price Bid):</u>

7.1 Online Payment of Tender Document Fee + Processing fee: The online payment for Tender document fee, Processing Fee & EMD can be done using the secure electronic payment gateway. The Payment for Tender Document Fee and Processing Fee shall be made by bidders/Vendors online directly through Debit Cards & Internet Banking Accounts and the Payment for EMD shall be made online directly through RTGS / NEFT & OTC.

The secure electronic payments gateway is an online interface between contractors and Debit card / online payment authorization networks.

# 7.2 PREPARATION & SUBMISSION OF online APPLICATIONS/BIDS:

- (i) Detailed Tender documents may be downloaded from e-Procurement website **https://etenders.hry.nic.in** and tender mandatorily be submitted online following the instruction appearing on the screen.
- (ii) Scan copy of Document to be submitted / uploaded for Technical bid under online Technical Envelope. The required documents (refer to DNIT) shall be prepared and scanned in different file formats (in PDF/JPEG/MS WORD format such that file size is not exceed more than 10 MB) and uploaded during the online submission of Technical Envelope.

# (iii) <u>FINANCIAL or Price Bid PROPOSAL shall be submitted mandatorily</u> <u>online under Commercial Envelope and original not to be submitted</u> <u>manually</u>)

# 8. ASSISTANCE TO THE BIDDERS

For queries on Tenders Haryana Portal, Kindly Contact Note: Bidders are requested to kindly mention the URL of the ortal and Tender ID in the subject shiel emailing any issue along with the contact detail. For any issue/clarification relating to the Tender (s) published kindly contact the repective tender Inviting Authority.

<u>Tel:-0120-4200462,0120-4001002</u> Mobile:88262-46593 Email:-support.etender@nic.in For any techincal related queries please call at 24x7 Help Desk number 0120-4001002,0120-4200462,0120-4001005,120-6277787

For support related to Haryana Tenders in addition to help desk you may also contact on email ID eproc.nichry@yahoo.com, <u>Tel:0172-2700275</u>

## Timing:

Technical support assistance will be available over telephone Monday to Friday (9:00am to 5:30pm) (Helpdesk Support in team shall not be contracted for online bidding on behalf of the contractors).

**Note:** Contact e-Procurement helpdesk on or before prior to 4 hours of the scheduled closing date and time of respecive e-tendering event. Also, for queries related to e-payment of EMD kinldy contact the helpdesk at least two days prior to closing date and time of the respective event.

Intended bidders mandatorily requried to register their quries if there is any pertaining to the online bidding and the single e-Procurment portal at email address:https://etenders.hry.nic.in

## NOTE:-

Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal https://etenders.hry.nic.in

## (Online Payment Guidelines)

# Guideline for Online Payments at e-Procurement Portal of Government of Haryana.

Post registration, bidder shall proceed for bidding by using both his digital certificates (one each for encryption and signing) & Password. Bidder shall proceed to select the event/Tenders he is interested in. On the respective Department's page in the e-Procurement portal, the Bidder would have following options to make payment for tender document fee + Processing fee & EMD:

- A. Debit Card
- B. Net Banking
- C. RTGS/NEFT or Over The Counter (OTC)

## **Operative Procedures for Bidder Payments**

#### A) Debit Card

## The procedure for paying through Debit Card will be as follows:

- (i) Bidder selects Debit Card option in e-Procurement portal.
- (ii) The e-Procurement portal displays the amount and the card charges to be paid by bidder. The portal also displays the total amount to be paid by the bidder.
- (iii) Bidder clicks on "Continue" button.
- (iv) The e-Procurement portal takes the bidder to Debit Card payment gateway screen.

- (v) Bidder enters card credentials and confirms payment
- (vi) The gateway verifies the credentials and confirms with "successful" or "failure" message, which is confirmed back to e-Procurement portal.
- (vii) The page is automatically routed back to e-Procurement portal
- (viii) The status of the payment is displayed as "successful" in e-Procurement portal.
- (ix) In case of successful payment, a success message along with unique transaction ID is passed on to e-Procurement system. The e-tendering portal shall store the unique transaction number in its database along with the date and timestamp.
- (x) The e-Procurement portal allows Bidder to process another payment attempt in case payments are not successful for previous attempt.
- B) Net Banking The procedure for paying through Net Banking will be as follows:
- (i) Bidder selects Net Banking option in e-Procurement portal.
- (ii) The e-Procurement portal displays the amount to be paid by bidder.
- (iii) Bidder clicks on "Continue" button
- (iv) The e-Procurement portal takes the bidder to Net Banking payment gateway screen displaying list of Banks
- (v) Bidder chooses his / her Bank
- (vi) The Net Banking gateway redirects Bidder to the Net Banking page of the selected Bank
- (vii) Bidder enters his account credentials and confirms payment
- (viii) The Bank verifies the credentials and confirms with "successful" or "failure" message to the Net Banking gateway which is confirmed back to e-Procurement portal.
- (ix) The page is automatically routed back to e-Procurement portal
- (x) The status of the payment is displayed as "successful" in e-Procurement portal.
- (xi) In case of successful payment, a success message along with unique transaction ID is passed on to e-Procurement system. The e-Procurement portal shall store the unique transaction number in its database alongwith the date and timestamp.
- (xii) The e-Procurement portal allows Bidder to process another payment attempt in case payments are not successful for previous attempt.

## C) RTGS/ NEFT

This solution shall also allow the bidder to make the EMD payment via RTGS/NEFT this shall add to the convenience of those bidders who are not conversant to use net banking option to make the transaction.

Using this module, bidder would be able to pay from their existing bank account through RTGS/NEFT. This would offer a wide reach for more than thousands bank branches and would enable the bidder to make the payment from almost any bank branch across India.

- 1. To choose the payment of EMD, the bidder clicks on RTGS/NEFT payment option.
- 2. Upon doing so, the e-Procurement portal will redirect the bidder to a page where it will generate a Challan.

3. This Challan shall include the beneficiary (virtual) account number and other details like beneficiary IFSC code each.

#### RTGS / NEFT Payment Procedure

The bidder shall be required to take a print of the challan and make the RTGS/ NEFT on the basis of the virtual account number period on the challan. This provision will ensure that number confidential details regarding the bidder or tender are disclosed to the bank while remitting the RTGS/NEFT.

The bidder would remit the fund at least one day in advance to the last day and make the payment via RTGS/NEFT to the beneficiary account number as mention in the challan. SBI Bank shall receive this amount and credit the payment gateway service provider intermediary Department/ PSUs Escrow Security Deposit account post validating the first part of the beneficiary account number, i.e., the client code only, In case of validation of client code is not successful, the bank shall return the fund and not credit the Techprocess intermediary Department/PSUs Escrow Security Deposit A/c.

# D) Over the Counter (OTC)

This solution shall allow the bidder having account with SBI bank, to make the payment from any CMS enables Branch of SBI Bank in India. Bidders can make the payment via cash (if amount is <=[]49,999), Demand Draft or SBI Bank Cheque.

The procedure for paying through OTC mode is as follows:

- (i) Bidder selects over the counter remittance option in e-Procurement portal.
- (ii) The e-Procurement portal displays the amount to be paid. The bidder chooses the bank account number for refund of the amount.
- (iii) Bidder clicks on "Continue" Button.
- (iv) The e-Procurement portal displays the details of payment. The Bidders click on "Print Challan" and print the OTC Challan.
- (v) Bidder submits the OTC Challan at the counter of any designated bank of SBI Bank with Cash/Demand Draft/SBI Bank Cheque (Payment in Cash is allowed upto Rs. 49,999/-).
- (vi) SBI bank verifies the URL (format to be discussed and decided) and amount with e-Procurement portal prior to accepting the payment.
- (vii) On successful verification from e-Procurement portal, SBI bank accepts the payment. In case of failure, SBI bank shall return back the OTC challan and payment to the bidder.
- (viii) SBI bank commits the payment transaction (in case of successful verification from e-Procurement portal) and sends the Bank Transaction number (I-Sure Reference Number) online against the URN and Amount.

- (ix) SBI bank will generate receipt for the payment transaction and issues the same to the bidder.
- (x) The e-Procurement system update the bank transaction number against the URN and Amount based on the details sent by SBI bank online prior to generation of the receipt.
- (xi) The status of the payment will be displayed as "verification successful" in e-Procurement Portal, when the bidder clicks on the verification option in the portal.
- (xii) Bidder would be required to upload the scan copy of receipt as received from SBI Bank as part of proof in next tender portal before submitting the tender.

## TERMS AND CONDITIONS

This is a two-bid tender to be submitted through e-tender, which can be online downloaded either from the Hafed's website: http://.hafed.gov.in or from https://etenders.hry.nic.in portal.

**1.** The technical as well as financial bid is to be submitted online on the web portal https://etenders.hry.nic.in. However, the firms have the option to submit the supporting documents as required to be supported along with the technical bid either through the online mode along with the technical bids.

2. Bidders will have to procure/should have a legally valid digital signature certificate as per the Information Technology Act 2000, using which they can sign their online bids. Documents for the technical bid and the financial bid shall be submitted separately as per details given below.

## 3. Technical bid

The proforma of technical bid is enclosed at **Annexure-1**.

The following documents are required to be submitted by the bidders with this Technical Bid:

- I. Self attested copies of the valid registration certificates of the firm/ company.
- II. OEM/ OEM Authorized bidder certificate for this e-tender.
- III. The interested bidder must have its presence (offices/ service centre) in the Tricity (Chandigarh, Panchkula & Mohali).
- IV. The interested bidder should have experience of successfully executing similar projects for at least 2-3 organizations preferably in Govt. departments/ PSUs.
- V. Bidder should not have been black listed by any State/ Central Government departments/ agencies or any other Public Sector undertaking as on the release date. (Self-undertaking on the letter head of the bidder duly signed and stamped by the Gazetted officer).
- VI. Self attested photocopy of PAN No. of the tendering company
- VII. Self attested photocopy of the GST Registration Number.

4. FINANCIAL BID: The rates are to be quoted in financial bids cover online. The proforma for the financial bid is enclosed at Annexure-2. Financial bid of only technically gualified bidders will be opened.

## 5. GENERAL TERMS & CONDITIONS:

- i. The detailed technical specifications along with the tendered quantity of each product are enclosed at **Annexure A**.
- ii. **EMD:** The earnest money of the unsuccessful tenderers will be refunded after the finalization of the tender. However, Hafed shall pay no interest on the earnest money. Tenders not accompanied with earnest money shall not be allowed to bid the e-tender. The EMD of successful tenderers will be adjusted in security deposit.
- iii. **Rates**: The rates offered should be F.O.R. destination i.e. HAFED Corporate Office, Sector-5, Panchkula, Haryana, and exclusive of taxes.
- iv. **Delivery & Execution Period:** The delivery of the products and the execution of the project will have to be done within 60 days from the date of placement of the supply order by Hafed.
- v Warranty: All the items will carry three years comprehensive onsite warranty.
- vi **Payment terms:** 60% payment will be released on delivery of the items, 30% payment will be released after successful installation/ operationalization of the project. The 10% payment will be released on submission of Bank Guarantee by the supplier @ 10% of the total project cost valid upto 3 years from the installation/ operationalization of the project. In case the supplier will not submit the Bank Guarantee then balance 10% amount of the total project cost will be adjusted as security and will be released after successful completion of 3 years.
- vii. **Penalty:** If the supplier fails to deliver any item within the prescribed period, the delayed consignment will be subject to Penalty @ 2% of the value of undelivered material shall be imposed on account of delay per week or part thereof subject to maximum of two weeks on the supplies as per the confirmed order. If supplier fails to supply the ordered material to Hafed Corporate office, Sector-5, Panchkula even during the grace period of two weeks (with penalty) then Hafed reserves its right to cancel the supply order/ contract and will be at liberty to arrange the material from any other sources at the risk and cost of the supplier.
- viii **Software updates:** The supplier will guarantee the provision of all the software updates during the entire contract period of three years.
- ix **Operational responsibility:** The overall responsibility for smooth operations of all the hardware/ software, data backup, data retrieval etc. will lie with the supplier for which he will deploy one technical support person in Hafed during the entire contract period of three years which may be extended on mutual consent basis.
- x <u>Arbitration</u>: In case of arising any dispute between Hafed and the suppliers, it will be referred for arbitration to the Registrar, Cooperative Societies Haryana, whose decision shall be binding and final on both the parties.

#### PERFORMA OF TECHNICAL BID

- 1. Self attested copies of the valid registration certificates of the firm/ company.
- 2. OEM/ OEM Authorized bidder certificate for this e-tender.
- 3. The interested bidder must have its presence (offices/ service centre) in the Tricity (Chandigarh, Panchkula & Mohali).
- The interested bidder should have experience of successfully executing similar projects for at least 2-3 organizations preferably in Govt. departments/ PSUs.
- 5. Bidder should not have been black listed by any State/ Central Government departments/ agencies or any other Public Sector undertaking as on the release date. (Self-undertaking on the letter head of the bidder duly signed and stamped by the Gazetted officer).
- 6. Self attested photocopy of PAN No. of the tendering company
- 7. Self attested photocopy of the GST Registration Number.
- Note: In case the bidder proposes any other Brand/ Make sufficiency to the technical specifications and the scope of the tender they should submit a complying statement on all parameters and comparison statement which ensure an equal or higher quality than the specified brands/ makes. Such Brand/ Make can be accepted by HAFED only if it is fully satisfied with such claim of the bidder on the basis of the documentary evidence to be submitted by the bidder for this purpose.

S.No.	Items	Specifications	Qty	Rate per item (in Rs.) exclusive of taxes
1.	Supply, installation, testing & commissioning of Dome Cameras (Honeywell/ Pelco/ Axis)	2-MP Full HD, IP Camera (specification at Annex-A)	31	
2.	Supply, installation, testing & commissioning of Bullet Camera (Honeywell/ Pelco/ Axis)	2-MP Full HD, IP Camera (specification at Annex-B)	8	
3.	Supply, installation, testing & commissioning of PTZ Camera (Honeywell/ Pelco/ Axis)	2-MP Full HD, IP Outdoor Camera (specification at Annex-C)	3	
4.	Supply, installation, testing & commissioning of Network Video Recorder (NVR) (Honeywell/ Pelco/ Axis)	32-CH NVR for upto 32 IP Cameras (specification at Annex-D)	2	
5.	Supply, installation, testing & commissioning of Hard Disk (WD Purple, Seagate)	8-TB Hard Disk	8	
6.	Supply, installation, testing & commissioning of POE Switch (Cisco, D-Link, Netgear)	8-Port Gigabit POE Plus Switch (specification at Annex-E)	3	
7.	Supply, installation, testing & commissioning of POE Switch (Cisco, D-Link, Netgear)		3	
8.	Supply, installation, testing & commissioning of LED TV (Sony, Samsung, LG)	65" LED TV with LFD technology (specification at Annex-G)	1	
9.	Supply, installation, testing & commissioning of 5 KVA Online UPS (APC, Luminous)	5 KVA Online UPS (specification at Annex-H)	1	
10.	Supply, installation, testing & commissioning of CAT 6 cable (Cisco, D-Link, Schneider)	CAT 6 cable (Tentative quantity 2000 Mtr ) (specification at Annex-I)	1 Mtr	
11.	Supply, installation, testing & commissioning of 2 Core	Power cable (Tentative quantity	1 Mtr	

	Power cable (Finolex, Havells , RR-Kabel)	2000 Mtr)		
12.	Supply, installation, testing & commissioning of Conduit/ PVC Piping (Astral, Finolex, Supreme, Prince)	PVC Pipes/ Batten (Tentative quantity 500 Mtr)	1 Mtr	
13.	Supply, installation, testing & commissioning of 8U Rack	Metal Rack for NVR	1	
14.	Operations/ upkeep of all the hardware/ software, data backup, data retrieval etc one Technical support Person required for 36 months	Monthly charges	1	

- All Taxes will be extra as applicable.
- The tentative quantity of the items at sr.no. 10 to 12 in the above table has been mentioned only for the purpose of financial evaluation of the bids and quantity may vary at the time of actual installation.
- For any statutory charges like EPF, ESI etc. of the technical support person, the responsibility will lie with the service provider.
- Note: In case the bidder proposes any other Brand/ Make to sufficiency to the technical specifications and the scope of the tender, they should submit a complying statement on all parameters and comparison statement which ensure an equal or higher quality than the specified brands/ makes. Such Brand/ Make can be accepted by HAFED only if it is fully satisfied with such claim of the bidder on the basis of the documentary evidence to be submitted by the bidder for this purpose.

## 2 MP IP Dome Camera

CAMERA TYPE			
Type of Camera Housing	DOME CAMERA		
IP Camera	Yes		
IMAGE SENSOR			
Image Sensor Type	CMOS		
Image Sensor Size	1 inch		
Camera Image Sensing capacity (Picture Mode)	2MP		
Resolution	Full HD (1920 x 1080 Pixel)		
Day/Night Capable	Yes		
IR illumination Range(mtr)	30		
OPTICS			
Lens Type	Fixed		
Focal Length(mm)	3.6		
Iris Control	Yes		
Focus Mode	Auto,Zooming,One Push,Manual		
VIDEO			
Frame Rate (fps)	30		
Video Compression	H.264		
Video Streaming	Triple compressed stream		
External Microphone Support	Yes		
ALARM			
Alarm Support	No		
SECURITY			
Multi Level User ID/Password	Yes		
IP Address Filtering	Yes		

Encrypted Data Transmission	HTTPS (SSL/TSL)	
PERFORMANCE		
Minimum Illumination for Capturing Color Image	0.1 lux	
Electronic Shutter Speed(sec)	1/3 to 1/10000	
WDR (Wide Dynamic Range)	DWDR	
SNR (Signal to Noise Ratio)	40-50	
Auto Exposure	Auto Level Control, Electronic Level Control	
FEATURES		
White Balance ( Indoor/Out door/Manual Selectable)	Yes	
Auto Gain Control (On/Off selectable)	Yes	
Back Light Compensation	Yes	
Remote Administration (Remote configuration and status using web based tool)	Yes	
Remote System Update Over Network	Yes	
PC Client (PC application client with a channel recording feature support)	Yes	
Web Client (Viewer through HTTP system configuration)	Yes	
On Screen Display in English	Yes	
ONVIF Support	Yes	
Presets	5	
Group Touring	5	
Privacy Zones	4	
NETWORK AND INTERFACE		
Supported Protocols UDP,DHCP,TC	CP/IP,NTP,RTSP,DDNS,SMTP,FTP,HTTPS	

IP Support Static,Dynamic		2
Signal Processing Digital Signal P		Process
IPv6 ready Yes		
Wireless	No	
Simultaneous Connections	5	
STORAGE		
On Board SD Card Sup	port	No
SD Card Memory(GB)		NA
HOUSING		
Installation Type		Indoor
Material of the Housing	construction	Plastic
Protection		IP 66
Vandal Resistant Housing		Yes
If Yes, IK rating		IK 10
Mounting bracket		Ceiling Mounted
Weight		369 gram
Dimensions (mm x mm	x mm)	87 X 108
POWER SUPPLY		
Power Input		12 V DC
Power Consumption		2 Watt
Suitable Adapter Shall be Supplied to Make the Equipment Work on 230 V (+/- 10 %), 50 Hz		NA
OPERATING CONDITIONS		
Operating Temperature Range		-20 to +50 deg C
Relative Humidity Non Condensing (%)		90

WARRANTY / SERVICES	
Warranty	3 year
Time for Replacement of Defective Product During Warranty Period	72 hour
Supply of Compatible drivers and software included	Yes
BIS Registration for safety general requirements as per IS 13252 (Part 1):latest	Yes
Availability of Type Test Report from Central Govt /NABL/ILAC accredited lab to prove conformity to specification	Yes
Test Report Number and Date	MT/2018/01 24/07/18
Name and Address of Test Lab	HONEYWELL
Certification	CE

## 2 MP IP Bullet Camera CAMERA TYPE

CAMERATIPE	
Type of Camera Housing	BULLET CAMERA
IP Camera	Yes
IMAGE SENSOR	
Image Sensor Type	CMOS
Image Sensor Size	1 inch
Camera Image Sensing capacity (Picture Mode)	2MP
Resolution	Full HD (1920 x 1080 Pixel)
Day/Night Capable	Yes
IR illumination Range(mtr)	30
OPTICS	
Lens Type	Fixed
Focal Length(mm)	3.6
Iris Control	Yes
Focus Mode	Auto
VIDEO	
Frame Rate (fps)	25
Video Compression	H.265+
Video Streaming	Dual compressed stream
ALARM	
Alarm Support	No
SECURITY	
Multi Level User ID/Password	Yes
IP Address Filtering	Yes
Encrypted Data Transmission	HTTPS (SSL/TSL)

PERFORMANCE		
Minimum Illumination for Capturing Color Image	0.1 lux	
Electronic Shutter Speed(sec)	1/3 to 1/10000	
WDR (Wide Dynamic Range)	DWDR	
SNR (Signal to Noise Ratio)	40-50	
Auto Exposure	Auto Level Control	
FEATURES		
White Balance ( Indoor/Out door/Manual Selectable)	Yes	
Auto Gain Control (On/Off selectable)	Yes	
Back Light Compensation	Yes	
Remote Administration (Remote configuration and status using web based tool)	Yes	
Remote System Update Over Network	Yes	
PC Client (PC application client with a channel recording feature support)	Yes	
Web Client (Viewer through HTTP system configuration)	Yes	
On Screen Display in English	Yes	
ONVIF Support	Yes	
Presets	0	
Group Touring	0	
Privacy Zones	4	
NETWORK AND INTERFACE		
Supported Protocols	TCP/IP	
IP Support	Dynamic	

Signal Processing	Digital Signal Process	
IPv6 ready	No	
Wireless	No	
Simultaneous Connections	5	
STORAGE		
On Board SD Card Support	No	
SD Card Memory(GB)	NA	
HOUSING		
Installation Type	Outdoor	
Material of the Housing construction	Alluminium	
Protection	IP 66	
Vandal Resistant Housing	No	
If Yes, IK rating	NA	
Mounting bracket	Wall Mounted	
Weight	605 gram	
Dimensions (mm x mm x mm)	87x219	
POWER SUPPLY		
Power Input	12 V DC	
Power Consumption	0 Watt	
Suitable Adapter Shall be Supplied to Make the Equipment Work on 230 V (+/- 10 %), 50 Hz	NA	
OPERATING CONDITIONS		
Operating Temperature Range	-20 to +50 deg C	
Relative Humidity Non Condensing (%)	90	
WARRANTY / SERVICES		
Warranty	3 year	

Time for Replacement of Defective Product During Warranty Period	72 hour
Supply of Compatible drivers and software included	Yes
BIS Registration for safety general requirements as per IS 13252 (Part 1):latest	Yes
Certification	CE

## 2 MP IP PTZ Camera

CAMERA TYPE	
Type of Camera Housing	DOME CAMERA
IP Camera	Yes
PTZ Camera	Yes
IMAGE SENSOR	
Image Sensor Type	CMOS
Image Sensor Size	0.34 inch
Camera Image Sensing capacity (Picture Mode)	2MP
Resolution	D1 (704 x 480 Pixel),HD (1280 x 720 Pixel),Full HD (1920 x 1080 Pixel)
Day/Night Capable	Yes
IR illumination Range(mtr)	50
OPTICS	
Lens Type	Motorized Varifocal
Focal Length(mm)	4.3 - 129
Iris Control	Yes
Focus Mode	Auto, Zooming
VIDEO	
Frame Rate (fps)	25,30,60
Video Compression	H.264,H.265,MJPEG
Video Streaming	Triple compressed stream
PAN / TILT / ZOOM	
Panning Range	0-360
Pan Speed (deg/sec)	240

Tilt Range below horizontal (deg)	0-90	
Tilt Range above horizontal (deg)	0-5	
Tilt Speed (deg/sec)	120	
Optical Zoom	30X	
Digital Zoom	16X	
AUDIO		
Audio Support	Yes	
Audio Compression	G.726,G.722.1,G.711,MP2L2,AAC	
Audio Streaming	Full Duplex	
Number of Audio Input Channel	1	
Number of Audio Output Channel	1	
External Microphone Support	Yes	
ALARM		
Alarm Support	Yes	
Number of Alarm Digital Input	2	
Number of Alarm Relay Output	1	
Pre/Post Alarm Buffer	Yes	
SECURITY		
Multi Level User ID/Password	Yes	
IP Address Filtering	Yes	
Encrypted Data Transmission	HTTPS (SSL/TSL)	
PERFORMANCE		
Minimum Illumination for Capturing Color Image	0.05 lux	
Electronic Shutter Speed(sec)	1/3 to 1/10000	
WDR (Wide Dynamic Range)	120 dB	
SNR (Signal to Noise Ratio)	40-50	

Auto Expos	sure	Auto Level Control, Electronic Level Control	
FEATURES	FEATURES		
	nce ( Indoor/Out al Selectable)	Yes	
Auto Gain ( selectable)	Control (On/Off	Yes	
Back Light	Compensation	Yes	
	ministration (Remote on and status using web	Yes	
Remote Sy Network	stem Update Over	Yes	
PC Client (PC application client with a channel recording feature support)		Yes	
	Web Client (Viewer through HTTP system configuration)Yes		
On Screen	On Screen Display in English Yes		
ONVIF Sup	ONVIF Support Yes		
Presets		100	
Group Tou	ring	8	
Privacy Zor	nes	24	
NETWORK	AND INTERFACE		
Supporte d Protocols	UDP,SNMP,IGMP,DHCP,RTP,RSTP,HTTP,SMTP,FTP,HTTPS,DNS, DDNS,RTSP,RTCP,NTP,UPnP,QoS,TCP/IP		
IP Support	Static		
Signal Processi ng	Digital Signal Process		
IPv6 ready	Yes		

Wireless	No	
Simultan eous Connecti ons	20	
STORAGE		
On Board S	SD Card Support	Yes
SD Card M	emory(GB)	128
HOUSING		
Installation	Туре	Indoor, Outdoor
Material of	the Housing construction	Alluminium
Protection		IP 66
Vandal Res	sistant Housing	No
lf Yes, IK ra	ating	NA
Mounting k	oracket	Wall Mounted
Weight		3500 gram
Dimension	s (mm x mm x mm)	186.0 mm × 309.0 mm
POWER SU	JPPLY	
Power Inpu	ıt	24 V DC, PoE
Power Con	sumption	23 Watt
	dapter Shall be Supplied e Equipment Work on 230 ), 50 Hz	Yes
OPERATING CONDITIONS		
Operating	Temperature Range	-20 to +50 deg C
Relative Hu (%)	umidity Non Condensing	90
WARRANTY / SERVICES		
Warranty		3 year
Time for Re	eplacement of Defective	72 hour

Product During Warranty Period	
Supply of Compatible drivers and software included	Yes
BIS Registration for safety general requirements as per IS 13252 (Part 1) : latest	Yes
Certification	FCC,CE,UL,CSA

# Network Video Recorder (NVR) 32 Channel

ТҮРЕ	
Type of Recording Device	NVR
IP Camera Support	Yes
PTZ Camera control Support	Yes
Housing construction	Alluminium
Mounting	Rack Mounted
Rack Mount configuration	2U
Capability of Recorder to Work with Other Makes of CCTV Cameras (ONVIF support)	Yes
VIDEO	
Number of Video Input Channels	32
Number of Non-IP based Video input Channels for HVR	32
Number of IP based Video input Channels for HVR	NA
Number of Video Output Channels	32
Recording Resolution	Full HD (1920 x 1080)
Supported Compression Technique	H.265,H.264
Maximum Number of cameras to be viewed on a single display	32
Total number of simultaneous local views	4
Simultaneous Monitoring Connections for All Cameras (Users in Local Network for Client Connection)	16
Recording Speed for all channels (fps)	25

Minimum Through put (Mbps) 384   Display Image Rate Real time per channel   AUDIO Yes   Audio Support Yes   Audio Output 1   Audio Compression G.726,G.711,G.722.1,A-Law,U-Law,MP2L2,AAC   Minimum Number of Simultaneous Channels for Two-way Audio Support 1   SECURITY Type of Encryption   Multi Level User ID / Password Yes   Alarm Support Yes   Alarm Output 1   Alarm Output 1   Pre / Post Alarm Recorting 1   Pre-Alarm Recorting 15 second   Video Content Imptics (VCA) Motion Detection, Intrusion Detection, Intrusion Detection, Impering   Network PROTECLS / INTERFACE / OPERATING SYSTEM   Operating System Supported UDP, SNMP, IGMP, DH-P, RTP, RSTP, HTTP, HTTPS, DNS, DDN b, RTSP, RTCP, NTP, FTP, SMTP, FTP, ICMP, QoS, TCP/IP   Supported Ethernet, RS 232, RS-422, RS-485, USB			
AUDIO   Yes     Audio Support   4     Audio Input   4     Audio Output   1     Audio Compression   G.726,G.711,G.722.1,A-Law,U-Law,MP2L2,AAC     Minimum Number of Simultaneous Channels for Two-way Audio Support   1     SECURITY   Type of Encryption     Type of Encryption   HTTPS (SSL/TSL)     Multi Level User I/ Password   Yes     ALARM   Yes     Alarm Support   Yes     Alarm Output   1     Pre / Post Alarm Hiffer   Yes     Pre-Alarm Recording   Yes     Video Content Augits (VCA)   Motion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Surgering     System Supported   Windows, MAC, Linux     Supported Network particles (VCA)   Motion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Surgering	Minimum Throug	h put (Mbps)	384
Audio Support   Yes     Audio Input   4     Audio Output   1     Audio Compression   G.726,G.711,G.722.1,A-Law,Ur Law,MP2L2,AAC     Minimum Number of Simultaneous Channels for Tweway Audio Support   1     Minimum Number of Simultaneous Channels for Tweway Audio Support   1     Minimum Number of Simultaneous 	Display Image Ra	te	Real time per channel
Audio Input   4     Audio Output   1     Audio Compression   G.726,G.711,G.722.1,A-Law,U-Law,MP2L2,AAC     Minimum Number of Simultaneous Channels for Two-way Audio Support   1     SECURITY   1     SECURITY   HTTPS (SSL/TSL)     Multi Level User ID / Password   Yes     ALARM   Yes     Alarm Support   Yes     Alarm Output   1     Fre / Post Alarm Hrfer   Yes     Pre-Alarm Recorting   15 second     Video Content Autor (VCA)   Motion Detection, Intrusion Detection, ampering     Network PROTECES / INTERFACE / OPERATING SYSTEM   Supported     Supported Network PROTECT / SRTP,RTTP,RSTP,HTTP,HTTPS,DNS,DDN S,RTSP,RTCP,NTP,VP,SMTP,FTP,ICMP,QoS,TCP/IP   Supported	AUDIO		
Audio Output   1     Audio Compression   G.726,G.711,G.722.1,A-Law,Ur Law,MP2L2,AAC     Minimum Number of Simultaneous Channels for Two-way Audio Support   1     SECURITY   1     Type of Encryption   HTTPS (SSL/TSL)     Multi Level User I/ Password   Yes     ALARM   Yes     Alarm Support   Yes     Alarm Output   1     Pre / Post Alarm Recording   Yes     Pre-Alarm Recording   15 second     Yideo Content → Lytics (VCA)   Motion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Supported     Operating System Supported   Windows, MAC, Linux     Supported   UDP,SNMP,IGMP,DK-P,RTP,RSTP,HTTP,HTTPS,DNS,DDN S,RTSP,RTCP,NTP,P,SMTP,FTP,ICMP,QoS,TCP/IP	Audio Support		Yes
Audio Compression   G.726,G.711,G.722.1,A-Law,U-Law,U-Law,MP2L2,AAC     Minimum Number of Simultaneous Channels for Two-way Audio Support   1     SECURITY   1     Type of Encryption   MITTPS (SSL/TSL)     Multi Level User I/ Password   Yes     ALARM   Yes     Alarm Support   Yes     Alarm Output   4     Alarm Output   1     Pre / Post Alarm Recore   Yes     Pre-Alarm Recore   Yes     Yideo Content try   15 second     Yideo Content try   Notion Detection, Intrusion Detection, ampring     Network groups   Windows, MAC, Linux     Speported   UDP, SNMP, IGMP, DR, P, RTP, RSTP, HTTP, HTTPS, DNS, DDN S, RTSP, RTCP, NTP, P, SMPP, FTP, ICMP, QoS, TCP/IP	Audio Input		4
Law,MP2L2,AAC     Minimum Number of Simultaneous Channels for Two-way Audio Support   1     SECURITY   HTTPS (SSL/TSL)     Type of Encryptior   HTTPS (SSL/TSL)     Multi Level User ID / Password   Yes     ALARM   Yes     Alarm Support   Yes     Alarm Output   1     Alarm Output   1     Pre / Post Alarm Recording   15 second     Pre-Alarm Recording   15 second     Video Content → IVICS (VCA)   Motion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, System     System Supported   Windows, MAC, Linux     Supported   UDP, SNMP, IGMP, DH, PRTP, RSTP, HTTP, HTTPS, DNS, DDN S, RTSP, RTCP, NTP, SMTP, FTP, ICMP, QoS, TCP/IP	Audio Output		1
Channels for Two-way Audio Support     SECURITY     Type of Encryption   HTTPS (SSL/TSL)     Multi Level User ID / Password   Yes     ALARM   Yes     ALarm Support   Yes     Alarm Support   Yes     Alarm Output   1     Pre / Post Alarm Frer   Yes     Pre-Alarm Record   Yes     Post-Alarm Record   15 second     Video Content Augert   15 second     Network RPROCORD / System   Motion Detection, Intrusion Detection, Tampering     Network RPROCORD / System   Windows, MAC, Linux     Supported   UDP, SNMP, IGMP, D, RTP, RSTP, HTTP, HTTPS, DNS, DDN S, RTSP, RTCP, NTP, SMTP, FTP, ICMP, QoS, TCP/IP	Audio Compressi	on	
Type of EncryptionHTTPS (SSL/TSL)Multi Level User ID PasswordYesALARMYesAlarm SupportYesAlarm Input4Alarm Output1Pre / Post Alarm WefferYesPre-Alarm Recore15 secondPost-Alarm Recore15 secondVideo Content Autrices (VCA)Motion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, SystemOperating System SupportedUDP, SNMP, IGMP, DUR, SMTP, FTP, SMTP, FTP, ICMP, QoS, TCP/IPSupportedUDP, SNMP, IGMP, DUR, SMTP, FTP, ICMP, QoS, TCP/IP			1
Multi Level User I/ Password   Yes     ALARM   Yes     Alarn Support   Yes     Alarn Input   4     Alarn Output   1     Pre / Post Alarm Hiffer   Yes     Pre-Alarm Recorrer   15 second     Post-Alarm Recorrer   15 second     Video Content → Lytics (VCA)   Motion Detection, Intrusion Detection, Intrusion Detection, Intrusion Peterction,	SECURITY		
ALARM   Yes     Alarm Support   Yes     Alarm Input   4     Alarm Output   1     Pre / Post Alarm Wefer   Yes     Pre-Alarm Record   Yes     Post-Alarm Record   15 second     Post-Alarm Record   15 second     Video Content Alardytics (VCA)   Motion Detection, Intrusion Detection, Tampering     NETWORK PROCOLS / INTERFACE / OPERATING SYSTEM   System Sys	Type of Encryptic	on	HTTPS (SSL/TSL)
Alarm SupportYesAlarm Input4Alarm Output1Alarm Output1Pre / Post Alarm EfferYesPre / Post Alarm Recorrectory15 secondPost-Alarm Recorrectory15 secondVideo Content Alyrics (VCA)Motion Detection, Intrusion Detection,	Multi Level User ID / Password		Yes
Alarm Input   4     Alarm Output   1     Pre / Post Alarm Buffer   Yes     Pre-Alarm Recording   15 second     Post-Alarm Recording   15 second     Video Content August   Motion Detection, Intrusion Detection, Intrusion Detection, Tampering     NETWORK PROCOLS / INTERFACE / OPERATING SYSTEM     Operating System Supported   Windows, MAC, Linux     Supported Network Protocols   UDP, SNMP, IGMP, DY, PRTP, RSTP, HTTP, HTTPS, DNS, DDN S, RTSP, RTCP, NTP, SMTP, FTP, ICMP, QoS, TCP/IP	ALARM		
Alarm Output   1     Pre / Post Alarm Buffer   Yes     Pre-Alarm Record   15 second     Post-Alarm Recording   15 second     Video Content August   Notion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, Intrusion Detection, System     NETWORK PROTOCOLS / INTERFACE / OPERATING SYSTEM     Operating System Supported   Windows, MAC, Linux     Supported Network Protocols   UDP, SNMP, IGMP, DF, RTP, RSTP, HTTP, HTTPS, DNS, DDN S, RTSP, RTCP, NTP, SMTP, FTP, ICMP, QoS, TCP/IP	Alarm Support		Yes
Pre / Post Alarm Buffer   Yes     Pre-Alarm Recording   15 second     Post-Alarm Recording   15 second     Video Content Align Kecording   Motion Detection, Intrusion Dete	Alarm Input 4		4
Pre-Alarm Recording   15 second     Post-Alarm Recording   15 second     Video Content Analytics (VCA)   Motion Detection, Intrusion Detection, Intrusion Detection, Tampering     NETWORK PROTOCOLS / INTERFACE / OPERATING SYSTEM     Operating System Supported   Windows, MAC, Linux     Supported Network Protocols   UDP, SNMP, IGMP, DHCP, RTP, RSTP, HTTP, HTTPS, DNS, DDN S, RTSP, RTCP, NTP, UDP P, SMTP, FTP, ICMP, QoS, TCP/IP	Alarm Output 1		1
Post-Alarm Recording   15 second     Video Content Analytics (VCA)   Motion Detection, Intrusion Detection, Tampering     NETWORK PROTOCOLS / INTERFACE / OPERATING SYSTEM     Operating System Supported   Windows, MAC, Linux     Supported Network Protocols   UDP,SNMP,IGMP,DHCP,RTP,RSTP,HTTP,HTTPS,DNS,DDN S,RTSP,RTCP,NTP,UPNP,SMTP,FTP,ICMP,QoS,TCP/IP	Pre / Post Alarm B	Buffer	Yes
Video Content Analytics (VCA)   Motion Detection, Intrusion Detection, Tampering     NETWORK PROTOCOLS / INTERFACE / OPERATING SYSTEM     Operating System Supported   Windows, MAC, Linux     Supported Network Protocols   UDP,SNMP,IGMP,DHCP,RTP,RSTP,HTTP,HTTPS,DNS,DDN S,RTSP,RTCP,NTP,UPnP,SMTP,FTP,ICMP,QoS,TCP/IP	Pre-Alarm Record	ling	15 second
Tampering     NETWORK PROTOCOLS / INTERFACE / OPERATING SYSTEM     Operating System Supported   Windows, MAC, Linux     Supported Network Protocols   UDP,SNMP,IGMP,DHCP,RTP,RSTP,HTTP,HTTPS,DNS,DDN S,RTSP,RTCP,NTP,UPnP,SMTP,FTP,ICMP,QoS,TCP/IP	Post-Alarm Recor	rding	15 second
Operating System SupportedWindows, MAC, LinuxSupported Network ProtocolsUDP,SNMP,IGMP,DHCP,RTP,RSTP,HTTP,HTTPS,DNS,DDN S,RTSP,RTCP,NTP,UPnP,SMTP,FTP,ICMP,QoS,TCP/IP	Video Content Analytics (VCA)		
System     Supported     Supported     UDP,SNMP,IGMP,DHCP,RTP,RSTP,HTTP,HTTPS,DNS,DDN     Network     Protocols	NETWORK PROTOCOLS / INTERFACE / OPERATING SYSTEM		
Network S,RTSP,RTCP,NTP,UPnP,SMTP,FTP,ICMP,QoS,TCP/IP Protocols	System	Windows, MAC, Linux	
Supported Ethernet, RS 232,RS-422,RS-485,USB	Network		
	Supported	Ethernet, RS 232,RS-422,RS-485,USB	

Interface			
Physical Layer of Ethernet	10/100/1000 Base TX		
Number of Ethernet Ports	1		
Number of HDMI Ports	2		
Number of VGA Ports	1		
Number of CVBS Ports	0		
Number of USB Ports	4		
Number of Serial Ports	0		
Number of PoE Ports	0	0	
Supported SIM Slot	NA		
Number of SIM Slots	0		
FEATURES			
Video Loop Supp	ort	Yes	
Video Recorder s on NAS Directly	Video Recorder supports recording Yes on NAS Directly		
	Remote Administration (Remote Configuration And Status Using Web Based Tool)Yes		
System Update (Remote System Update Over Network Using Web Client)Yes		Yes	
PC Client (PC Application Client With Yes A Channel Recording Feature Support)		Yes	

Web Client (Viewer through HTTP system configuration)	Yes
On Screen Display (In English)	Yes
Drivers / Compatible Software (Wherever Applicable) Part Of Supply	Yes
Recording schedule support	Yes
Bandwidth Control	Yes
Camera Notification	Spot (POP up Window) on Event,SMS,E- mail
Network transmission Speed	Real time display @ D1 resolution
Other features, if any	na
PLAYBACK / VIEW / MANAGEMENT	
Search	Date,Time,Event,Log,Motion,Bookmarks
Bookmarks	Forward,Backward,adjustable playback speed,Full Screen,Next Camera,Previous Camera,Repeat
Page preview	Multi Monitor Support,Video Window,Electronic Map on two separate monitors
Total Management	Group add, Delete, Group management
Camera	Add,Edit,Delete,Use Master account,Use Specific account
STORAGE	
Internal Hard Drive Interface	SATA III
Number of Hard Disks (inclusive in the scope of supply)	4
Storage Capacity of each Hard Disk (TB)	4
Total Storage Capacity(TB)	16
Internal Storage Expandable upto (TB)	32

Number of Hard Disks supported	4
Redundancy Option	NA
POWER SUPPLY	
Power Input	230 ± 10%, 50Hz
Power Consumption	102 Watt
Suitable Adapter to be Supplied to Make the Equipment Work on 230 V $\pm$ 10 %, 50 Hz	Yes
Redundant Power Supply	No
OPERATING CONDITIONS	
Minimum Operating Temperature	0 degree Celsius
Maximum Operating Temperature	40 degree Celsius
Relative Humidity Non Condensing at 40 deg C	80 percent
WARRANTY / SERVICES	
Warranty	3 year
Time for Replacement of Defective Product During Warranty Period	48 hour
ENVIRONMENTAL / CERTIFICATION	
Availability of facility and infrastructure for verification of all the parameters, features and capability with the Seller	Yes
Conformity to Dry Heat test at Specified Maximum Operating Temperature for 16 hours as per IS :9000 latest	Yes
Conformity to Damp heat at 40 degree C - 95% RH (cyclic test): two cycles of 16+8 hours as per IS: 9000 latest	Yes
Conformity to Cold test at Specified Minimum Operating Temperature for 4 hours as per IS: 9000 latest	Yes

BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest	Yes
Certification	FCC

# POE 8 Port Switch

Specification	
Type of Switch	UnManaged
Technology	PoE
Number of 1G Copper Ports	8
Number of 10G Copper Ports	1
No. of 1 G SFP Port (Uplink)	2
No. of 10 G SFP+ Port (Uplink)	0
Multi-Gigabit Support	Yes
Redundant Power supply ( from day one)	Available
Console Port	Not Available
Switching Capacity -Non Blocking (Gbps)	20
Throughput (MPPS)	14
Operating System	available
Dedicated Stacking Port/Slot ( from day one)	Not available
Stacking Bandwidth (Gbps)	20
Operating Temperature Range (Degree C)	-10
Operating Humidity (RH)(%)	+50
IPv6 Ready from day one and dully certified	Yes
PoE Power Budget (Watt)	60
on Site OEM Warranty	3

# POE 16 Port Switch

Specification	
Type of Switch	UnManaged
Technology	PoE+
Number of 1G Copper Ports	16
Number of 10G Copper Ports	1
No. of 1 G SFP Port (Uplink)	0
No. of 10 G SFP+ Port (Uplink)	1
Multi-Gigabit Support	Yes
Redundant Power supply ( from day one)	Available
Console Port	Not Available
Switching Capacity -Non Blocking (Gbps)	100
Throughput (MPPS)	100
Operating System	available
Dedicated Stacking Port/Slot ( from day one)	Not available
Stacking Bandwidth (Gbps)	0
Operating Temperature Range (Degree C)	55
Operating Humidity (RH)(%)	90
IPv6 Ready from day one and dully certified	Yes
PoE Power Budget (Watt)	4.25
on Site OEM Warranty	3

## 65" LED TV

Specifications		
Туре	LED Backlit LCD	
Screen Size (Inches)	65	
Resolution (Pixels)	(3840x2160) UHD	
Category	Smart	
Operating System in case of Smart TV	Web OS	
Static contrast Ratio	1000 : 1	
Typical Brightness	400 - 500	
Screen Mirroring	Yes	
Mount Type	Both table and wall mount	
Inbuilt Speakers	Yes	
If Yes, Wattage of Speakers	10W x 2	
Sub Woofers	No	
Power Consumption (Watts)	195	
Ports & Connectivity		
Number of HDMI Ports	3	
Number of USB Ports	2	
Number of VGA Ports	0	
Number of Ethernet Ports	1	
Built-in Wi-fi	Yes	
Wi-fi Direct	Yes	
Input		
Composite Input	Yes	
Component Input	Yes	

RF Input	Yes
Accessories	
Built-in set-top Box	No
Details of accessories (included in the scope of supply)	Remote Control, Connecting Cable, Batteries
Certification	
BIS Registration as per CRS of Meity	Yes
<b>BIS Registration Number</b>	R-75000086
Energy Star Rating in line with the Government of Indiia Notification number S O 1896(E) and S O 1897(E)	NA
Generic	
Minimum Operating Temperature (Degree C)	0
Maximum Operating Temperature (Degree C)	40
Minimum Operating Humidity (%RH)	10
Maximum Operating Humidity (%RH)	80
Dimensions (Length x Breadth x Depth) (mm x mm x mm )	1463 X 914 X 269
Weight (Kg)	21.6
Warranty	
	3

# 5 KVA Online UPS

Output		
Output power capacity : 4.5kWatts / 5.0kVA		
Max Configurable Power (Watts) : 4.5kWatts / 5.0kVA		
Nominal Output Voltage: 230V		
Output Voltage Note : Configurable for 220 : 230 or 240 nominal output voltage		
Efficiency at Full Load : 94.0 %		
Output Voltage Distortion: Less than 5%		
Other Output Voltages: 220, 240		
Topology: Double Conversion Online		
Waveform type: Sine wave		
Output Connections: (1) Hard Wire 3-wire (H N + G) (Battery Backup)		
Bypass: Built-in Static Bypass		
Input		
Nominal Input Voltage: 230V		
Input frequency: 40 - 70 Hz (auto sensing)		
Input Connections: Hard Wire 3-wire		
Input voltage range for main operations : 160 - 285V		
Efficiency at Full Load: 94.0 %		
Batteries & Runtime		
Battery type: No internal battery - uses external battery system,		
Communications & Management		
Control panel: Multi-function LCD status and control console		
Emergency Power Off (EPO): Yes,		
Surge Protection and Filtering		
Surge energy rating: 480Joules		
Filtering: Full time multi-pole noise filtering : 0.3% IEEE surge let-through : zero		
clamping response time : meets UL 1449		
Environmental		
Operating Temperature: 0 - 40 °C		
Operating Relative Humidity: 0 - 95 %		
Operating Elevation: 0-900meters		
Storage Temperature: -10 - 40 °C		
Storage Relative Humidity: 0 - 95 %		
Storage Elevation: 0-3000meters		
Audible noise at 1 meter from surface of unit: 55.0dBA		
Conformance		
Standard warranty: 3 years repair or replace		

# CAT – 6 Cable

CONSTRUCTIONAL		
Telephone Pair cable used for Telecom data transmission, Intercome, EPBAX, FAX, Closed circuit security System.	Yes	
Conductor Materail	Copper	
Insulation	PVC	
Shelding	No	
Minimum Diameter over insulation (mm)	1.04	
Overall diameter of cable (mm)	6	
CERTIFICATIONS		
Product Conforming to TEC Specification	Yes	
Distinct Color Coding system	As per TEC Specification	
Availability of complete and satisfactory type test Report from Central govt/ NABL/ ILAC accredited laboratory as per Govering Specification	Yes	
Test certificate number	102706991CRT-002	
Test report date	26/10/2016	
Name of lab where test conducted	ETL - Intertek	