

Project: Installation of CCTV System at Cargo, Guwahati Airport

ASHA ENTERPRISES

S.No.	Eligibility Criteria	Doc Uploaded (Yes/No)
1.	Letter indicating the capacity and authority of individual digitally signing tender documents	Not understood
2.	Legal Status of Bidder as per Sec A: Copy of Certificate of Registration under Shop & Establishment Act or Registrar of Firms or Companies Act / Partnership Deed/Memorandum of Article of Association (MOA) or other	Complied
3.	<u>Work experience</u> - As per of Sec A Criteria: Should have satisfactorily completed similar works in line with any one of the following criteria during last seven years ending on 31/03/2019 (i) One work costing not less than Indian Rs. 3,67,710.00 (ii) Two separate works each costing not less than Indian Rs. 2,29,819.00 (iii) Three separate works each costing not less than Indian Rs. 1,83,855.00	Not submitted
	<u>Work completion Certificate</u> : As per of Sec A Criteria: End user's satisfactory completion certificate mentioning 1. Work Order Number, 2. Value and Date of completion of the work (Date of Completion of work prior to 31/03/2012 shall not be considered)	Not submitted
4.	Annualized average Financial Turnover (at least Rs. 1,37,891.00) As per of Sec A: Copies of abridged balance sheets along with profit and loss account to be enclosed	Profit & Loss statement not submitted
5.	Undertaking (Submission of bids) as per Annexure – II of tender document	Complied
6.	Undertaking in the format as per Annexure –III (Regarding Dealership etc.)	Complied
7.	MAF from OEMs (as per Annexure –IV of tender document) – In case of System Integrator	Complied
8.	Undertaking (for not black listed) as per Annexure – V of tender Document	Complied
9.	Duly signed and stamped General compliance as per Annexure – VI of tender Document	Complied
10.	Duly signed and stamped Technical compliance as per Annexure – VII of tender document	Complied
11.	Complete List of deliverables – (Bill of Quantity) with Make and Model number of Equipment and accessories offered - fully meeting the Technical & Qualitative Requirement as spelt out in Technical Specification of tender, WITHOUT INDICATING THE PRICE as per Annexure – VIII of tender document	Complied
12.	Undertaking in the format as per Annexure – X (GST Undertaking)	Complied
13.	Check List for "e Cover – 2" documents as per Annexure – XIV	Complied
14.	Copy of GST Registration	Complied
15.	Copy of PAN Card	Complied
16.	Technical Brochure of offered make and model of IP IR Outdoor PTZ Camera	Complied
17.	Technical Brochure of offered make and model of Bullet Camera (IP Based)	Complied
18.	Technical Brochure of offered make and model of Managed 24-Port PoE Switch (IPv6 compliant)	Complied
19.	Technical Brochure of offered make and model of 32 Channel NVR	Complied
20.	Technical Brochure of offered make and model of 3 KVA UPS	Not uploaded
21.	Technical Brochure of offered make and model of Display Monitor	Complied




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TECHNICAL SPECIFICATION OF ITEMS TO BE SUPPLIED

Technical Specification Para-1

IP IR Outdoor PTZ Camera			
S/No	Features /Specifications		Remarks
1.	Camera Features	(a) Image Sensor	1/2.8" CMOS or better
		(b) Resolution	2 Mega pixel (1920x1080), Full HD (1080p) resolution with 25 fps streaming or better
		(c) White Balance	Auto/Manual/Indoor/Outdoor
		(d) (d) Zoom	Built-in 25x Optical or better
		(e) AGC	Auto/Manual
		(f) Pan/Tilt Range	360° Endless Pan, Tilt/Zoom with Tilt range 0 degree to 90 degree
		(g) IR Distance	Up to 150m
		(h) WDR	120 dB or better
		(i) Min Preset Position	Minimum 200 preset position
(j)	Network Interface	(a) Interface	1 RJ45 10 M/100 M Ethernet, Hi-PoE
		(b) Network protocols	TCP/IP, HTTP, HTTPS, SMTP, IGMP etc.
(c)	General features	(a) ONVIF Compliance	ONVIF compliance mandatory
		(b) Power Supply	self-adaptive or PoE+ (802.3af complied)
		(c) Protection Rating	IP66 or better

Handwritten signatures:

[Signature] *[Signature]* *Shanku Kumar*

Bullet Camera (IP Based)				
Sr.No	Features / Specifications			Remarks
1.	Camera General features	(1) Image sensor	1/2.8" progressive scan CMOS or higher	Complied
		(2) Effective Pixels	2.0 MP or better	Complied
		(3) Image resolution	1080P(1920 x1080)	Complied
		(4) Frame rate	1080P@ 25f/s, 720P@ 25 f/s	Not complied 1080P@20f/s
		(5) WDR	80db or better	Complied
		(6) Minimum Illumination	0.05lux (color), 0.001lux(IR on)	Not complied 0.09luc (color)
		(7) Day/Night	IR cut filter	Complied
		(8) Video parameters	Contrast, brightness, saturation	Not mentioned
2.	Lens	(9) Focal Length	3.6 mm or better	Complied
		(10) Lens mount	M12	Not mentioned
3.	IR LEDs	(11) IR distance	30 M or better	Complied
4.	Interface	(12) Network Port	10/100M Ethernet interface RJ45	Complied
5.	Encode Mode	(13) Video Compression	H.265 and H.264	Complied
6.	Others Requirements	(14) Network protocol	TCP/UDP/HTTP/ UPnP/DHCP/DDNS/ FTP/NTP/RTP/RTSP	Complied
		(15) System clock	Build-in clock, support external synchronization	Not mentioned
		(16) Intelligent alarm	Motion detection	Complied
		(17) Operating Temp.	0 deg C to 50 deg C or Better.	Complied
		(18) Operating Humidity	0%-90 % non-condensing.	Complied
		(19) ONVIF Compliance	ONVIF compliance	Complied
		(20) Power Supply	PoE+ (802.3af complied)	Complied
		(21) Storage	Micro SD Card (Optional)	Not mentioned

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Technical Specification Para-3

Managed 24-Port PoE Switch			
Sr.No	Features / Specifications		Remarks
1.	Features	(1) Managed Layer 2, 24 x 10/100/1000 mbps POE Gigabyte, Managed Layer 2, PoE Switch	Complied
2.	Physical Ports	(2) 4 SFP Ports, PoE capable RJ 45 Ports : 12 or more	4 SFP Port not available
3.	PoE Standard :	(3) 802.3af	Complied
4.	Port Standard	(4) IEEE 802.3 10 base-T/100 base -T/1000 base-T	Complied
5.	Switching Capacity	(5) at least 48 Gbps	Complied
6.	Management features	(6) (a) IPV6 Management (b) SNMP V1/V2/V3 (c) Web GUI (d) System log (e) Simplified CLI (f) SNTF	Not mentioned Built in SNMP Complied Complied Complied Not mentioned
7.	Security Features	(7) (a) 802.1x (b) MAC address Binding (c) RADIUS (d) Broadcast, Multicast	Not mentioned Complied Not mentioned Complied
8.	Application Support	(8) CCTV Surveillance system support	Complied
9.	Environmental Temperature	(9) 0 to 40 Degree or better	Complied
10.	Environmental Humidity	(10) 10-90 % or better	Complied
11.	Accessory	(11) 19" Rack Mountable, etc as required	Complied

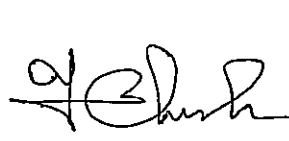
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Technical Specification Para-4

32 Channel NVR				
Sl No.	Features / Specifications			Remarks
1	System	Functions	Live, recording, playback, backup & support up to 8 MP resolution preview and play back	Complied
2	Video & Audio Interface	(a) IP Camera	Minimum 32 channel Camera	Complied
		(b) Output	2 HDMI, 1VGA	Complied
3	Display	(a) Display Split	Up to 16 channel	Complied
		(b) Resolution	1920×1080, 1280×720, 1024×768	Complied
4	Recording	Video/Audio	Compression H.264 /H.265	Complied
5	Video Detection & Alarm	(a) Trigger Events	Recording, PTZ movement, Tour, Alarm	Complied
		(b) Motion Detection	Motion Detection supportive	Complied
6	Auxiliary Interface	(a) USB Interface	3 USB ports	Complied
		(b) RS232	Keyboard, PC communication	Complied
		(c) RS485	PTZ control	Complied
7	Playback & Backup	(a) Playback Channel	Minimum 4 channel	Complied
		(b) Search Mode	Time/Date	Complied
		(c) Playback Function	Standard features	Complied
		(d) Backup Mode	Flash drive/USB /HDD	Complied
8	Network	(a) Ethernet	RJ-45 port(10/100M/1000M)	Complied
		(b) Network Function	HTTP,TCP/IP, SMTP,NTP,DHCP,DNS, DDNS	Complied
9	Storage Capacity	Hard Disk	Storage capacity 32 TB or more (Supply 16TB HDD with NVR)	Complied
10	General	(a) Power Supply	AC220V,50Hz	Complied
		(b) ONVIF Compliance	ONVIF supportable	Complied

Technical Specification Para-5

UPS 3 KVA				
Sl No.	Features / Specification required			Remarks
1	Type		Single Phase, Online UPS	Brochure not uploaded. Could not be checked
2	UPS Rating	Capacity	3 KVA / 240V	
3	Input Parameters	(a) I/P Frequency Range	40Hz ~ 60 Hz	
		(b) Phase	Single phase with ground	
		(c) I/P Power Factor	≥ 0.8 @ 220 to 230 VAC (input voltage)	
4	Output Parameters	(a) Output Voltage	220/230/240VAC	
		(b) AC Voltage Regulation	$\pm 3\%$ (Battery. Mode)	
		(c) Frequency Range	50 / 60 Hz	
		(d) Overload Capacity / Warning	Min 110% with indication	
		(e)		
		(f) Output PF	0.8 or better	
		(g) O/P Waveform	Pure Sine wave	
5	General	(a) Backup time:	Min. 30 minutes	
		(b) Warranty :	Minimum 1 year	
		(c) Audible Alarm	Yes	
		(d) Output Sockets	Minimum 3	
		(e) Battery	Maintenance free Battery with rack	
		(f) Certificate	CE Certified	
		(g) Alarm Protection	Battery Low, Inverter Under/Over Voltage, UPS Over load, Short Circuit.	
		(h) LED Indication	Normal Operation, Bypass, Fault, and Battery mode	
		(i) Redundancy	Load sharing	


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Technical Specification Para-6

Display Monitor			
SI No.	Features/ Specifications		Remarks
1.	Type & Screen Size	LED 40 inches	Complied
2.	Resolution	1,920 x 1,080 (FHD)	Complied
3.	Aspect Ratio	16:9	Not mentioned in Brochure
4.	Video Input	HDMI (2), DVI, USB	DVI Not mentioned
5.	Operation	24x7	Not mentioned
6.	Power Supply	Standard 230 V AC	Complied
7.	Operating Temp range	0 to 40	Not mentioned
8.	Operating Humidity Range	10 to 80%	Not mentioned
9.	Mount for fixing on wall/Table	Required as per site	Not mentioned
10.	Support	Suitable for NVR	Not mentioned

Technical Specification Para-7

OFC Cables		
SI No.	Features/ Specifications	Remarks
1.	6F Unitube Armored, Rodent Proof, UV Protection	Complied through Annex-VII
2.	Tube Excellent Water Proof Layer and Moisture Resistance.	
3.	Light Weight and Compact Structure & Flame resistance	
4.	Should fulfill the requirements of: IEC 60793-1/60794-1.2	
5.	6F single mode	
6.	ISO Standard <u>9001/11801</u>	
7.	Suitable for indoor/outdoor Local Area network system	

Technical Specification Para-8

Media Converter		
SI No.	Features/ Specifications	Remarks
1.	Standard: - IEEE 802.3 ISI standard	Complied through Annex-VII
2.	Interface: - 1 SFP port, 1 10/100/1000Mbps RJ45 port	
3.	Transmission Media: Multi/Single mode Fiber, TP	
4.	Appropriate Media converter compatible with L3/L2 switches	

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Technical Specification Para-9

<u>LAN Cable</u>		
SI No.	Features/ Specifications	Remarks
1.	Standard CAT 6 SFTP cable compliant to TIA/EIA-568-C and ISO/IEC 11801,	Complied through Annex-VII
2.	Frequency compliance 200 MHz	
3.	Flame Retardant	
4.	Preferable Brand D-Link or equivalent	

Technical Specification Para-10

<u>Rack 9U</u>		
SI No.	Features/ Specifications	Remarks
1.	Standard 19" Equipment rack	Complied through Annex-VII
2.	Construction: Steel	
3.	Height suitable for 2 (two) adjustable shelves: for PoE Switch & LIU	
4.	Should be able to hold the load (weight) mentioned above switch	
5.	The front side will be covered by Glass Door, rest all sides covered by Steel sheets, the bottom cover should have Cable entry provision.	
6.	Equipment Mounting: DIN standard slots Mounting Angle: 19" made of steel . Rack shall be wall mounting type. Standard finished Powder Coated.	

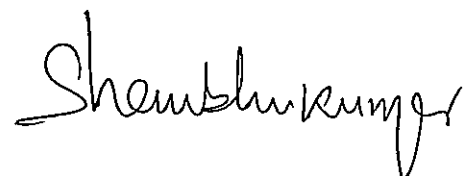
Technical Specification Para-11/12GI Pipe & HDPI Pipe

	Remarks
Quality as per ISI standard	Complied through Annex-VII

Other Accessories/Requirements

	Remarks
As per requirements	Complied through Annex-VII
All the items must be of good quality	
Others existing Cameras needs to be integrated with new System/NVR.	
Pigtails 2mtrs for SM use as per system requirement.	





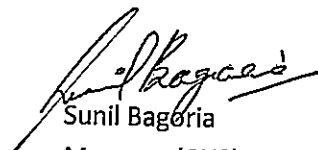
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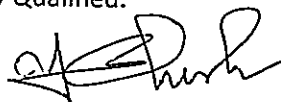
Observations

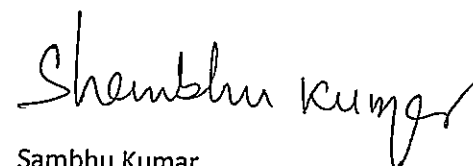
1. Party doesn't have work experience
2. Profit Loss statement not uploaded
3. Major Non Compliance observed in technical Specification of many items
4. Many Parameters of Technical Specifications are not mentioned in Brochure of most items

Conclusion

May not be considered as Technically Qualified.


Sunil Bagoria
Manager (CNS)


T.K. Ghosh
DGM (AS)


Sambhu Kumar
Manager (CNS)

Project: Installation of CCTV System at Cargo, Guwahati Airport**Unitech Services Group**

S.No.	Eligibility Criteria	Doc Uploaded (Yes/No)
1.	Letter indicating the capacity and authority of individual digitally signing tender documents	Not understood
2.	Legal Status of Bidder as per Sec A: Copy of Certificate of Registration under Shop & Establishment Act or Registrar of Firms or Companies Act / Partnership Deed/Memorandum of Article of Association (MOA) or other	Complied
3.	Work experience - As per of Sec A Criteria: Should have satisfactorily completed similar works in line with any one of the following criteria during last seven years ending on 31/03/2019 (i) One work costing not less than Indian Rs. 3,67,710.00 (ii) Two separate works each costing not less than Indian Rs. 2,29,819.00 (iii) Three separate works each costing not less than Indian Rs. 1,83,855.00	Complied
	Work completion Certificate: As per of Sec A Criteria: End user's satisfactory completion certificate mentioning 1. Work Order Number, 2. Value and Date of completion of the work (Date of Completion of work prior to 31/03/2012 shall not be considered)	Complied
4.	Annualized average Financial Turnover (at least Rs. 1,37,891.00) As per of Sec A: Copies of abridged balance sheets along with profit and loss account to be enclosed	Complied
5.	Undertaking (Submission of bids) as per Annexure – II of tender document	Complied
6.	Undertaking in the format as per Annexure –III (Regarding Dealership etc.)	Company declared himself as OEM. But through Annex-IV they have submitted OEM authorize letter, which is contradictory
7.	MAF from OEMs (as per Annexure –IV of tender document) – In case of System Integrator	Submitted OEM authorized letter. But through annex-III they have declared themselves as OEM which is contradictory.
8.	Undertaking (for not black listed) as per Annexure – V of tender Document	Complied
9.	Duly signed and stamped General compliance as per Annexure – VI of tender Document	Complied
10.	Duly signed and stamped Technical compliance as per Annexure – VII of tender document	Complied
11.	Complete List of deliverables – (Bill of Quantity) with Make and Model number of Equipment and accessories offered - fully meeting the Technical & Qualitative Requirement as spelt out in Technical Specification of tender, WITHOUT INDICATING THE PRICE as per Annexure – VIII of tender document	Complied
12.	Undertaking in the format as per Annexure – X (GST Undertaking)	Complied
13.	Check List for "e Cover – 2" documents as per Annexure – XIV	Complied
14.	Copy of GST Registration	Complied
15.	Copy of PAN Card	Complied
16.	Technical Brochure of offered make and model of IP IR Outdoor PTZ Camera	Complied
17.	Technical Brochure of offered make and model of Bullet Camera (IP Based)	Complied
18.	Technical Brochure of offered make and model of Managed 24-Port PoE Switch (IPv6 compliant)	Complied
19.	Technical Brochure of offered make and model of 32 Channel NVR	Complied
20.	Technical Brochure of offered make and model of 3 KVA UPS	Complied
21.	Technical Brochure of offered make and model of Display Monitor	Complied

Shambhu Kumar *AKD*

TECHNICAL SPECIFICATION OF ITEMS TO BE SUPPLIED

Technical Specification Para-1

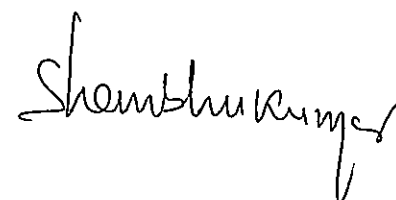
IP IR Outdoor PTZ Camera				
S/No	Features /Specifications			Remarks
1.	Camera Features	(a) Image Sensor	1/2.8" CMOS or better	Complied
		(b) Resolution	2 Mega pixel (1920x1080), Full HD (1080p) resolution with 25 fps streaming or better	Complied
		(c) White Balance	Auto/Manual/Indoor/Outdoor	Nothing mentioned
		(d) (d) Zoom	Built-in 25x Optical or better	Complied
		(e) AGC	Auto/Manual	Complied
		(f) Pan/Tilt Range	360° Endless Pan, Tilt/Zoom with Tilt range 0 degree to 90 degree	Complied
		(g) IR Distance	Up to 150m	Complied
		(h) WDR	120 dB or better	Complied
		(i) Min Preset Position	Minimum 200 preset position	Complied
(j)	Network Interface	(a) Interface	1 RJ45 10 M/100 M Ethernet, Hi-PoE	Complied
		(b) Network protocols	TCP/IP, HTTP, HTTPS, SMTP, IGMP etc.	Complied
(c)	General features	(a) ONVIF Compliance	ONVIF compliance mandatory	Complied
		(b) Power Supply	self-adaptive or PoE+ (802.3af complied)	Complied
		(c) Protection Rating	IP66 or better	Complied

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Technical Specification Para-2

Bullet Camera (IP Based)				
Sr.No	Features / Specifications			Remarks
1.	Camera General features	(1) Image sensor	1/2.8" progressive scan CMOS or higher	Complied
		(2) Effective Pixels	2.0 MP or better	Complied
		(3) Image resolution	1080P(1920 x1080)	Complied
		(4) Frame rate	1080P@ 25f/S, 720P@ 25 f/S	Complied
		(5) WDR	80db or better	Not meeting required specification
		(6) Minimum Illumination	0.05lux (color), 0.001lux(IR on)	Complied
		(7) Day/Night	IR cut filter	Complied
		(8) Video parameters	Contrast, brightness, saturation	Nothing mentioned
2.	Lens	(9) Focal Length	3.6 mm or better	Complied
		(10) Lens mount	M12	Nothing mentioned
3.	IR LEDs	(11) IR distance	30 M or better	Complied
4.	Interface	(12) Network Port	10/100M Ethernet interface RJ45	Complied
5.	Encode Mode	(13) Video Compression	H.265 and H.264	Complied
6.	Others Requirements	(14) Network protocol	TCP/UDP/HTTP/ UPnP/DHCP/DDNS/ FTP/NTP/RTP/RTSP	Complied
		(15) System clock	Build-in clock, support external synchronization	Nothing mentioned
		(16) Intelligent alarm	Motion detection	Complied
		(17) Operating Temp.	0 deg C to 50 deg C or Better.	Complied
		(18) Operating Humidity	0%-90 % non-condensing.	Complied
		(19) ONVIF Compliance	ONVIF compliance	Complied
		(20) Power Supply	PoE+ (802.3af complied)	Complied
		(21) Storage	Micro SD Card (Optional)	Nothing mentioned


Technical Specification Para-3

<u>Managed 24-Port PoE Switch</u>			
Sr.No	Features / Specifications		Remarks
1.	Features	(1) Managed Layer 2, 24 x 10/100/1000 mbps POE Gigabyte, Managed Layer 2, PoE Switch	Complied
2.	Physical Ports	(2) 4 SFP Ports, PoE capable RJ 45 Ports : 12 or more	Complied
3.	PoE Standard :	(3) 802.3af	Complied
4.	Port Standard	(4) IEEE 802.3 10 base-T/100 base -T/1000 base-T	Complied
5.	Switching Capacity	(5) at least 48 Gbps	Complied
6.	Management features	(6) (a) IPV6 Management (b) SNMP V1/V2/V3 (c) Web GUI (d) System log (e) Simplified CLI (f) Sntp	Complied
7.	Security Features	(7) (a) 802.1x (b) MAC address Binding (c) RADIUS (d) Broadcast, Multicast	Complied
8.	Application Support	(8) CCTV Surveillance system support	Complied
9.	Environmental Temperature	(9) 0 to 40 Degree or better	Complied
10.	Environmental Humidity	(10) 10-90 % or better	Complied
11.	Accessory	(11) 19" Rack Mountable, etc as required	Complied


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32 Channel NVR				
Sl No.	Features / Specifications			Remarks
1	System	Functions	Live, recording, playback, backup & support up to 8 MP resolution preview and play back	Complied
2	Video & Audio Interface	(a) IP Camera	Minimum 32 channel Camera	Complied
		(b) Output	2 HDMI, 1VGA	Complied
3	Display	(a) Display Split	Up to 16 channel	Complied
		(b) Resolution	1920×1080, 1280×720, 1024×768	Complied
4	Recording	Video/Audio	Compression H.264 /H.265	Complied
5	Video Detection & Alarm	(a) Trigger Events	Recording, PTZ movement, Tour, Alarm	Not mentioned
		(b) Motion Detection	Motion Detection supportive	Not mentioned
6	Auxiliary Interface	(a) USB Interface	3 USB ports	Complied
		(b) RS232	Keyboard, PC communication	Complied
		(c) RS485	PTZ control	Complied
7	Playback & Backup	(a) Playback Channel	Minimum 4 channel	Complied
		(b) Search Mode	Time/Date	Complied
		(c) Playback Function	Standard features	Complied
		(d) Backup Mode	Flash drive/USB /HDD	Complied
8	Network	(a) Ethernet	RJ-45 port(10/100M/1000M)	Complied
		(b) Network Function	HTTP,TCP/IP, SMTP,NTP,DHCP,DNS, DDNS	Nothing mentioned about all protocols except NTP & DHCR
9	Storage Capacity	Hard Disk	Storage capacity 32 TB or more (Supply 16TB HDD with NVR)	Complied
10	General	(a) Power Supply	AC220V,50Hz	12VDC Supply required to run the NVR
		(b) ONVIF Compliance	ONVIF supportable	Complied

 Shambhu Kumar 

Technical Specification Para-5

UPS 3 KVA				
Sl No.	Features / Specification required			Remarks
1	Type	Single Phase, Online UPS		Complied
2	UPS Rating	Capacity	3 KVA / 240V	Complied
3	Input Parameters	(a) I/P Frequency Range	40Hz ~ 60 Hz	Nothing mentioned
		(b) Phase	Single phase with ground	Complied
		(c) I/P Power Factor	≥ 0.8 @ 220 to 230 VAC (input voltage)	Complied
4	Output Parameters	(a) Output Voltage	220/230/240VAC	Complied
		(b) AC Voltage Regulation	$\pm 3\%$ (Battery. Mode)	Complied
		(c) Frequency Range	50 / 60 Hz	Complied
		(d) Overload Capacity / Warning	Min 110% with indication	Complied
		(e) Output PF	0.8 or better	Nothing mentioned
		(f) O/P Waveform	Pure Sine wave	Complied
5	General	(a) Backup time:	Min. 30 minutes	Complied
		(b) Warranty :	Minimum 1 year	Complied
		(c) Audible Alarm	Yes	Complied
		(d) Output Sockets	Minimum 3	Complied
		(e) Battery	Maintenance free Battery with rack	Complied
		(f) Certificate	CE Certified	Nothing mentioned
		(g) Alarm Protection	Battery Low, Inverter Under/Over Voltage, UPS Over load, Short Circuit.	Nothing mentioned
		(h) LED Indication	Normal Operation, Bypass, Fault, and Battery mode	Not meeting required specifications
		(i) Redundancy	Load sharing	Nothing mentioned

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Technical Specification Para-6

Display Monitor			
SI No.	Features/ Specifications		Remarks
1.	Type & Screen Size	LED 40 inches	Complied
2.	Resolution	1,920 x 1,080 (FHD)	Complied
3.	Aspect Ratio	16:9	Nothing mentioned
4.	Video Input	HDMI (2), DVI, USB	Nothing mentioned about DVI
5.	Operation	24x7	Nothing mentioned
6.	Power Supply	Standard 230 V AC	Complied
7.	Operating Temp range	0 to 40	Nothing mentioned
8.	Operating Humidity Range	10 to 80%	Nothing mentioned
9.	Mount for fixing on wall/Table	Required as per site	Complied
10.	Support	Suitable for NVR	Nothing mentioned

Technical Specification Para-7

OFC Cables		
SI No.	Features/ Specifications	Remarks
1.	6F Unitube Armored, Rodent Proof, UV Protection	Complied through Annex-VII
2.	Tube Excellent Water Proof Layer and Moisture Resistance.	
3.	Light Weight and Compact Structure & Flame resistance	
4.	Should fulfill the requirements of: IEC 60793-1/60794-1.2	
5.	6F single mode	
6.	ISO Standard <u>9001/11801</u>	
7.	Suitable for indoor/outdoor Local Area network system	

Technical Specification Para-8

Media Converter		
SI No.	Features/ Specifications	Remarks
1.	Standard: - IEEE 802.3 ISI standard	Complied through Annex-VII
2.	Interface: - 1 SFP port, 1 10/100/1000Mbps RJ45 port	
3.	Transmission Media: Multi/Single mode Fiber, TP	
4.	Appropriate Media converter compatible with L3/L2 switches	





Technical Specification Para-9

<u>LAN Cable</u>		
Sl No.	Features/ Specifications	Remarks
1.	Standard CAT 6 SFTP cable compliant to TIA/EIA-568-C and ISO/IEC 11801,	Complied through Annex-VII
2.	Frequency compliance 200 MHz	
3.	Flame Retardant	
4.	Preferable Brand D-Link or equivalent	

Technical Specification Para-10

<u>Rack 9U</u>		
Sl No.	Features/ Specifications	Remarks
1.	Standard 19" Equipment rack	Complied through Annex-VII
2.	Construction: Steel	
3.	Height suitable for 2 (two) adjustable shelves: for PoE Switch & LIU	
4.	Should be able to hold the load (weight) mentioned above switch	
5.	The front side will be covered by Glass Door, rest all sides covered by Steel sheets, the bottom cover should have Cable entry provision.	
6.	Equipment Mounting: DIN standard slots Mounting Angle: 19" made of steel . Rack shall be wall mounting type. Standard finished Powder Coated.	

Technical Specification Para-11/12

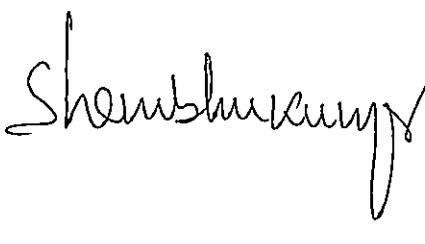
GI Pipe & HDPI Pipe

	Remarks
Quality as per ISI standard	Complied through Annex-VII

Other Accessories/Requirements

	Remarks
As per requirements	Complied through Annex-VII
All the items must be of good quality	
Others existing Cameras needs to be integrated with new System/NVR.	
Pigtails 2mtrs for SM use as per system requirement.	

Handwritten signatures:




Observations

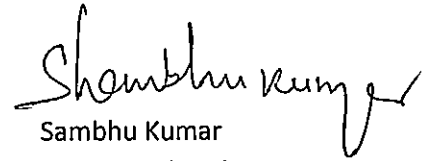
1. Many parameters of Technical Specifications are not mentioned in brochures of NVR, UPS & Monitor.
2. One Parameter not meeting the required specification of Bullet Camera
3. WDR of Bullet Camera not meeting the required specifications
4. NVR will not run directly connected to 230 VAC. Hence not meeting required specifications

Conclusion

- a) In general meeting all parameters except few.
- b) Many not mentioned parameters needs verification.


Sunil Bagoria
Manager (CNS)


T.K. Ghosh
DGM (AS)


Sambhu Kumar
Manager (CNS)

Signature Not Verified

Digitally signed by ANJU TOMAR
Date: 2020.06.03 13:22:25 IST
Location: eProcurement System for
Central PSUs