

TENDER EVALUATION- TECHNICAL BID -PART 1- GENERAL INFORMATION

Tender No. TENDER NO.: AAI/ANS/CNS/VOML/2019/ANS-CCTV/T-08

SITC& CAMC OF CCTV SYSTEM FOR ANS AT MANGALURU INTERNATIONAL AIRPORT

Tender Ref: ANNEX XIV	Description	COMPLIED YES /NO						
		Win Plus Trading	E Vision India Pvt Ltd	Sacaya Technologies Pvt Ltd	IINA	Data Links	Aravind Ltd	Techser Power solutions
1	Scanned copy of Demand Draft submitted towards the Tender Fee	YES	NO*	YES	YES	YES	NO	YES
2	Scanned copy of Demand Draft submitted towards the EMD	YES	NO*	YES	YES	YES	NO	YES
3	Duly signed& Sealed Proforma for submitting Eligibility requirements & Undertaking. (Annexure-I)	YES	YES	YES	YES	YES		YES
4	Undertaking stating its firm or its partners or its Directors have not been black listed(Annexure-II)	YES	YES	YES	YES	YES		YES
5	Copy of Valid GST Registration certificate	YES	YES	YES	YES	YES		YES
6	Copy of the Permanent Account Number (PAN)	YES	YES	YES	YES	YES		YES
7	Abridged Balance Sheet along with Profit & Loss account of the bidder for last three years	YES	YES	YES	YES	YES		YES
8	Performance/Experience/Completion Certificate	YES	YES	YES	YES	YES		YES
9	Proof of being Original Equipment Manufacturer/ authorized representative/system integrator	YES	YES	YES	YES	YES		YES

Prusa-M.D.

Sandeep G
Sandeep G
Manager (Elec)
3/3/2020

63/03/2020
C. M. M. M.
S. M. M. M.

10	Undertaking of Authenticity for Supply of Electronics Goods (Annexure-V)	YES	YES	YES	YES	YES		YES
11	Applicable rate of Statutory taxes at the time of submission of tender(Annexure-VI)	YES	YES	YES	YES	YES		YES
12	Duly signed Tender Document	YES	YES	YES	YES	YES		YES
13	Duly filled Compliance statement for Terms & Conditions (Section-B)	YES	YES	YES	YES	YES		YES
14	Duly filled Compliance statement for Technical Specification with Make & Model. (Annexure-IV)	YES	YES	YES	YES	YES		YES
15	Technical Broachurs in support of Compliance statement for Technical Specification	YES	partially	YES	YES	YES		YES
	QUALIFIED OR NOT	NO	NO	YES	YES	YES	NO	NO

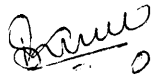
* M/s E-Vision India Pvt Ltd claimed for MSME benefits, but not eligible, as vendor is not OEM for offered products from sl no 12 to 15 . Also , the Products offered by Vendor do not comply with technical specifications.

TECHNICAL BID - TENDER EVALUATION- PART 2- TECHNICAL SPECIFICATION COMPLIANCE STATEMENT ATTACHED.

TOTAL NO. OF TENDERS RECEIVED: SEVEN


03/03/2020
HYDRU M P , DGM(CNS)

NO OF TECHNICALLY QUALIFIED TENDERS: THREE


03/03/2020
PIUSA M D , AGM(ELEX)


03/03/2020
SANDEEP G, MGR(ELEX)

TENDER EVALUATION- TECHNICAL BID -PART 2- GENERAL INFORMATION
Tender No. TENDER NO.: AAI/ANS/CNS/VOML/2019/ANS-CCTV/T-08
SITC& CAMC OF CCTV SYSTEM FOR ANS AT MANGALURU INTERNATIONAL AIRPORT

SL NO	Parameters	Specifications	SPECIFICATION COMPLIANCE- YES/NO					
			WIN PLUS TRADING	e Vision India Pvt Ltd	Sacaya Technologies Pvt Ltd	IINA	Data Links	Techser Power solutions
1	Item No. 1: 5MP IP IR Bullet Camera , Qty -2 Nos		Avtron AM-DM5064-FMA2	EV IP 5MPSD	DS-2CD3051 G0-I	HC-IPC-T4215DZS-VF	DS-2CD3051 G0-I	CP-UNC-TB51L3-MDS
a	Image Sensor	1 /2.7" Progressive scan CMOS	YES	YES	YES	YES	YES	YES
b	Min. Illumination	0.08Lux @ F2.0, and 0 Lux with IR LED on for (B/W)	YES	YES	YES	YES	YES	YES
c	Shutter Speed	1 /12500s to 1 /25s	YES	YES	YES	YES	YES	YES
d	Lens	2.8 to 3.6mm	YES	NO	YES	YES	YES	YES
e	DNR digital noise reduction	3DNR/ 2DNR (Auto/Manual)	YES	YES	YES	YES	YES	YES
f	Wide Dynamic Range	True WDR (120dB)	YES	YES	YES	YES	YES	YES
g	Video Compression	H. 265/H.264/MJPEG	YES	YES	YES	YES	YES	YES
h	Video Bit Rate	128Kbps- 4Mbps	YES	NO	YES	YES	YES	YES
i	No. of Streams	Triple stream support	YES	NO	YES	YES	YES	YES
j	Resolution	5 MP 2560x 1920	YES	YES	YES	YES	YES	YES
k	Frame Rate	1-25fps	YES	YES	YES	YES	YES	YES
l	Sub Stream	720p up to 20 fps	YES	YES	YES	YES	YES	YES

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03/03/2020
Manager (Elec)

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03/03/2020
PIUSA M.D
AGMEL.

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Sandeep G
Manager (Elec)

m	Others	Saturation, Contrast, Brightness, Hue, Sharpness, Rotate, White Balance Auto/ adjustable by client software or web browser	YES	YES	YES	YES	YES	YES
n	Network Storage	Network Recording	YES	YES	YES	YES	YES	YES
o	Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, ONVIF S	YES	YES	YES	YES	YES	YES
p	General	Motion Detection, Recording, Image/Clip Upload	YES	YES	YES	YES	YES	YES
q	Certification	BIS, RoHS	YES	YES	YES	YES	YES	YES
r	Communication Interface	10Base-T/100BaseTX Ethernet (RJ-45)	YES	YES	YES	YES	YES	YES
s	Power Supply	PoE (IEEE 802.3af)	YES	YES	YES	YES	YES	YES
t	IR Range	Up to 30m	YES	YES	YES	YES	YES	YES
u	Housing	IP 66	YES	YES	YES	YES	YES	YES
v	Working Temperature	0 to 40 Degree c	YES	YES	YES	YES	YES	YES
w	Humidity	90% RH non condensing	YES	YES	YES	YES	YES	YES
x	Warranty	1 year	YES	YES	YES	YES	YES	YES
2 Item No. 2: 3MP IP IR Dome Camera , Qty -10 Nos			Avtron AM-DM4035-FMR1	EV-IPAR3D	DS-2CD3143G 0-I	HC-IPC-D4214D-VF	DS-2CD3143G 0-I	CP-UNC-VB41ZL4S-VMDS
a	Image Sensor	1 /2.8" Progressive Scan CMOS	YES	YES	YES	YES	YES	YES
b	Min. Illumination	0.08Lux @ F2.0@ 1/ 25s, 0Lux with IR LED on for (B/W)	YES	YES	YES	YES	YES	YES
c	Shutter Speed	1 /12500s to 1 /25s	YES	YES	YES	YES	YES	YES

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Sandeep

d	Focal Length	2.8-12mm	YES	YES	YES	YES	YES	YES
e	FOV	DFOV (degrees) 110°	YES		YES	YES	YES	YES
f	IR Range	Up to 30m	YES	YES	YES	YES	YES	YES
g	Network Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, PPPOE, SMTP, NTP, SNMP, HTTPS, FTP, ONVIF S	YES	YES	YES	YES	YES	YES
h	Video Compression	H. 265/ H.264/ MJPEG	YES	YES	YES	YES	YES	YES
i	Resolutions	3MP(2048x 1536)	YES	YES	YES	YES	YES	YES
j	Stream Profiles	3 streams support	YES	YES	YES	YES	YES	YES
k	Bitrate	128Kbps-4Mbps	YES		YES	YES	YES	YES
l	Frame Rate	1 -25fps	YES	YES	YES	YES	YES	YES
m	Image Enhancements	Saturation, Contrast, Brightness, Hue, Sharpness, Rotate, White Balance	YES	YES	YES	YES	YES	YES
n	WDR	True WDR (120dB)	YES	NO	YES	YES	YES	YES
o	Image Features	Digital Zoom, Image Snapshots	YES	YES	YES	YES	YES	YES
p	DNR	3D DNR	YES	YES	YES	YES	YES	YES
q	Recording Type	Network Recording, Alarm Recording	YES	YES	YES	YES	YES	YES
r	Events	Motion Detection, IP-Conflict, Network- Disconnect, Storage Alert	YES	YES	YES	YES	YES	YES
s	Communication Interface	10 Base-T/100M Ethernet (RJ-45)	YES	YES	YES	YES	YES	YES
t	Storage	SD Card up to 64GB	YES	NO	YES	YES	YES	YES
u	Certification	BIS, RoHS	YES	YES	YES	YES	YES	YES
v	Power Supply	PoE (IEEE 802.3af)	YES	YES	YES	YES	YES	YES

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w	Operating temperature	0 to 40 degree c	YES	YES	YES	YES	YES	YES
x	Operating Humidity	90% RH non condensing	YES	YES	YES	YES	YES	YES
y	Warranty	1 year						
3	Item No. 3: 3MP Motorized varifocal IP IR Dome Camera, Qty -10 Nos		AM-SM4030-MMR3	EV IP VF3D	DS-2CD3745G 0-IZS	HC-IPC-D4214D-VF	DS-2CD3745G 0-IZS	CP-UNC-VB41ZL4-VMDS
a	Sensor Type and Size	1 /2.5" progressive scan CMOS	YES	NO	YES	YES	YES	1/3 inch
b	Minimum Illumination	Color: 0.06 lux @ (f/1.4,AGC on), 0 lux with IR	NO	YES	YES	YES	YES	YES
c	Focal Length	2.8 mm to 12 mm motorized varifocal lens	YES	NO	YES	YES	YES	YES
d	FOV	2.8 mm to 12 mm, horizontal FOV: 110 ⁰ to 32 ⁰ , vertical FOV: 55 ⁰ to 20 ⁰ , diagonal FOV: 140 ⁰ to 35 ⁰	YES	YES	YES	YES	YES	YES
e	Shutter Speed	1 /3s to 1/ 100,000 s	YES	YES	YES	YES	YES	YES
f	Aperture	f/1.4	YES	YES	YES	YES	YES	YES
g	IR Range	30m	YES	YES	YES	YES	YES	YES
h	Network Protocols	TCP/IP, HTTP, HTTPS, FTP,DHCP, DNS,DDNS, RTP,RTSP,RTCP, PPPoE, NTP, SMTP, SNMP,IPv4, IPv6,ONVIF S	YES	YES	YES	YES	YES	YES
i	Video Compression	H. 265/H.264;MJPEG	YES	YES	YES	YES	YES	YES
j	Resolutions	3 MP	YES	YES	YES	YES	YES	YES

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Interview n/1)

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Sandeep J

	Number of Simultaneous Streams	Triple stream	YES	YES	YES	YES	YES	YES
l	Bitrate	128 Kbps to 16 Mbps	YES		YES	YES	YES	YES
m	Frame rate	25fps	YES	YES	YES	YES	YES	YES
n	Image Enhancements	3D DNR Rotate mode, saturation, brightness, contrast, sharpness adjustable by client software or web browser	YES	YES	YES	YES	YES	YES
o	WDR	120dB	YES	NO	YES	YES	YES	YES
p	DNR	3D DNR	YES	YES	YES	YES	YES	YES
q	Events	Motion detection, network disconnected, IP address conflict, HDD full, HDD error	YES	YES	YES	YES	YES	YES
r	Communication	RJ45 10M/100M self-adaptive Ethernet port	YES	YES	YES	YES	YES	YES
s	Storage	Support SD card (128Gb), Network/NAS support	YES	NO	YES	YES	YES	YES
t	Power Supply	PoE (802.3af/at)	YES	YES	YES	YES	YES	YES
u	Certifications	BIS, RoHS	YES	YES	YES	YES	YES	YES
v	Operating Temperature	0 to 40 deg C	YES	YES	YES	YES	YES	YES
w	Operating Humidity	90% RH (non-condensing)	YES	YES	YES	YES	YES	YES
x	Warranty	1 Year						
4	Item No 4: 3MP IP IR Bullet Camera, Qty -12 Nos		AM-DM4064FMA 2	EV IP 3MPSD	DS-2CD3045G 0-I	HC-IPC- T4214D-VF	DS-2CD3641G 0	CP-UNC- TB41ZL6-VMD

08/03/2020

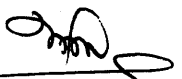
a	Sensor Type and Size	1 /2.8" ,progressive scan CMOS	YES	YES	YES	YES	YES	YES
b	Minimum Illumination	Color: 0.06 lux (F1.8, AGC ON), 0 lux with IR on	YES	YES	YES	YES	YES	YES
c	Focal Length	2.8 - 12 mm	YES	YES	YES	YES	YES	YES
d	Aperture	F1.4	YES	YES	YES	YES	YES	YES
e	FOV	HFOV (Degrees) 95 to 35 ⁰ , VPOV (degrees) 45 ⁰ to 20 ⁰ , DFOV (degrees) 100 ⁰ to 40 ⁰	YES	YES	YES	YES	YES	YES
f	Shutter Speed	1s to 1/100000 s	YES	YES	YES	YES	YES	YES
g	IR Range	30m	YES	YES	YES	YES	YES	YES
h	Network Protocols	IPv4, IPv6, TCP/IP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, HTTP, HTTPS, SMTP, SNMP ONVIF S	YES	YES	YES	YES	YES	YES
i	Video Compression	H. 265, H.264, MJPEG	YES	YES	YES	YES	YES	YES
j	Resolutions	3 MP	YES	YES	YES	YES	YES	YES
k	Number of Simultaneous Streams	Triple stream	YES	YES	YES	YES	YES	YES
l	Bitrate	16 Kbps - 16 Mbps	YES	NO	YES	YES	YES	YES
m	Frame rate	25fps	YES	YES	YES	YES	YES	YES
n	Image Enhancements	Rotate mode, Saturation, Brightness, Contrast adjustable by client software or web browser	YES	YES	YES	YES	YES	YES
o	WDR	120dB	YES	YES	YES	YES	YES	YES

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(CUMM)

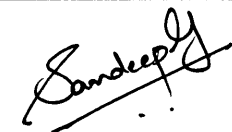
Dr. S. S. S.

Sandeep

p	DNR	3DNR/2DNR	YES	YES	YES	YES	YES	YES
q	Events	Motion detection, smart IR mode and network failure detection	YES	YES	YES	YES	YES	YES
r	Communication Interface	RJ45 10M/100M Base- TX Ethernet	YES	YES	YES	YES	YES	YES
s	Storage	SD card: Up to 128GB	YES	NO	YES	YES	YES	YES
t	Power Supply	PoE (IEEE802.3 af)	YES	YES	YES	YES	YES	YES
u	Certifications	BIS, RoHS	YES	YES	YES	YES	YES	YES
v	Operating Temperature	0 to 40 deg C	YES	YES	YES	YES	YES	YES
w	Operating Humidity	90% RH (non-condensing)	YES	YES	YES	YES	YES	YES
x	Warranty	1 Year	YES	YES	YES	YES	YES	YES
5	Item No:-5: 8 Channel NVR with 4K Support and 1 HDD Slot Qty- 2 Nos		AM-S110-UHD	EV NVR8	DS-7608NI-I2	HD-NVR-5108S	DS 7608-I2	CP-UNR-4K5082-V2
a	IP Camera Input	8 IP Channels	YES	YES	YES	YES	YES	YES
b	Video Output	HDMI x 1, VGA x 1	YES	YES	YES	YES	YES	YES
c	Compression	H.265/H.264/	YES	YES	YES	YES	YES	YES
d	Resolution(VGA/HD MI)	8 Channel @ D1	YES	YES	YES	YES	YES	YES
e	Hard Disk	1 SATA III(8TB per port minimum)	YES	YES	YES	YES	YES	YES
f	Trigger Events	Recording failure, Storage Alert, Disk Volume Full, Disk Fault, Scheduled Backup Fail	YES	YES	YES	YES	YES	YES
g	Motion detection	YES	YES	YES	YES	YES	YES	YES
h	Recording Mode	Continuous	YES	YES	YES	YES	YES	YES
i	Search Mode	Date and time, Camera,	YES	YES	YES	YES	YES	YES


03/02/2020





500295/2020/O/o APD(CALICUT)-SR

j	Playback mode	Regular(Play, Pause, stop) Speed control, Next-Previous Frame	YES	YES	YES	YES	YES	YES
k	Backup Mode	Network/NAS support	YES	YES	YES	YES	YES	YES
l	Interface Ports	1x RJ-45 10/100/1000 Mbps Ethernet, USB (1x USB 3.0)(1x USB 2.0)	YES	YES	YES	YES	YES	YES
m	Record Interval	Pre-Record Up to 10 Sec Post-Record 10-300 Sec	YES	YES	YES	YES	YES	YES
n	Protocols	TCP/IP,IPv4/IPv6, ONVIF,NTP,DNS,DDNS,HTTP,SMTP	YES	YES	YES	YES	YES	YES
o	Power Supply	230V± 10V, 50 Hz or DC supply with suitable power adapter	YES	YES	YES	YES	YES	YES
p	Working Temperature	0 deg to 40 deg C	YES	YES	YES	YES	YES	YES
q	Humidity	90% RH non-condensing	YES	YES	YES	YES	YES	YES
u	Warranty	1 year						
6	Item No:-6: 16Channel NVR with 4K Support and 2 HDD Slot Qty- 1 Nos		AM-i220-UHD	EV NVR16	DS7616N I-I2	HD-NVR-5216EHP	DS7616 NI-I2	CP-UNR-4K5162-16EV2
a	IP Camera Input	16 IP Channels	YES	YES	YES	YES	YES	YES
b	Video Output	HDMI x 1, VGA x 1	YES	YES	YES	YES	YES	YES
c	Compression	H.265/H.264/	YES	YES	YES	YES	YES	YES
d	Resolution(VGA/HD MI)	16 Channel @ D1	YES	YES	YES	YES	YES	YES
e	Hard Disk	2 SATA III(8TB per port)	YES	YES	YES	YES	YES	YES

f	Trigger Events	Recording failure, Storage Alert, Disk Volume Full, Disk Fault, Scheduled Backup Fail	YES	YES	YES	YES	YES	YES
g	Motion detection	YES	YES	YES	YES	YES	YES	YES
h	Recording Mode	Continuous	YES	YES	YES	YES	YES	YES
i	Search Mode	Date and time, Camera,	YES	YES	YES	YES	YES	YES
j	Playback mode	Regular(Play, Pause, stop) Speed control, Next-Previous Frame	YES	YES	YES	YES	YES	YES
k	Backup Mode	Network/NAS support/USB	YES	YES	YES	YES	YES	YES
l	Interface Ports	1 RJ-45 port(10/100/1000 Mbps) PoE:16 Ports (802.3af/at) USB 2.0 x2, USB 3.0 x1	YES	YES	YES	YES	YES	YES
m	Record Interval	Pre-Record Up to 10 Sec Post -Record 10-300 Sec	YES	YES	YES	YES	YES	YES
n	Protocols	TCP/IP,IPv4/IPv6, ONVIF,NTP,DNS,DDNS,HTTP,SMTP	YES	YES	YES	YES	YES	YES
o	Power Supply	230V± 10V, 50 Hz or DC supply with suitable power adapter	YES	YES	YES	YES	YES	YES
p	Working Temperature	0 deg to 40 deg C	YES	YES	YES	YES	YES	YES
q	Humidity	90% RH non-condensing	YES	YES	YES	YES	YES	YES
u	Warranty	1 year						


02/08/2020




Sandeep

7	Item No:-7: 8TB Surveillance Hard Disk Qty- 11 Nos		WD81purZ 8TB	WD82PU RZ	Toshiba S300	ST8000 VX0022	ST8000 VX0022	WD82PURZ
	a	Form Factory	3.5"	YES	YES	YES	YES	YES
	b	Memory Storage capacity	8TB	YES	YES	YES	YES	YES
	c	H/W Interface	SATA 6.0 Gb/s	YES	YES	YES	YES	YES
	d	Cache	256 Mb	YES	YES	YES	YES	YES
	e	Application	NVR/8 TB,8 bay NAS	YES	YES	YES	YES	YES
	g	Rotational Vibration(RV) sensor	YES	YES	YES	YES	YES	YES
	h	Raid Support	YES	YES	YES	YES	YES	YES
	i	Operating Temperature	5 to 60 deg C	YES	YES	YES	YES	YES
	j	Humidity	90% or Better RH non condensing	YES	YES	YES	YES	YES
	k	Warranty	1 year					
8	Item No:-8: NETWORK ATTACHED STORAGE(DISKLESS DRIVE) Qty- 1 Nos		Netgear RR3312	Synology DS1819	Netgear RR3312	Netgear RR3312	RR3312	RR3312
	a	CPU	Quad-core 3.2 GHz	YES	NO	YES	YES	YES
	b	Memory	4 GB expandable	YES	YES	YES	YES	YES
	c	Drive Bays	8 TB X 8 BAYS	YES	YES	YES	YES	YES
	d	Drive Types Supported	3.5" SATA HDD	YES	YES	YES	YES	YES
	e	Hot Swappable Drives	YES	YES	YES	YES	YES	YES

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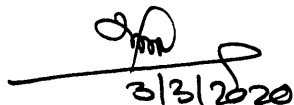
f	eSATA Ports	2	YES	YES	YES	YES	YES	YES
g	Gigabit LAN Ports	4	YES	YES	YES	YES	YES	YES
h	USB Ports	2x USB3.0	YES	YES	YES	YES	YES	YES
i	Power Supply	230V AC,50HZ	YES	YES	YES	YES	YES	YES
j	Working Temperature	0 deg to 40 deg C	YES	YES	YES	YES	YES	YES
k	Humidity	90% RH non condensing	YES	YES	YES	YES	YES	YES
l	Warranty	1 year	YES	YES	YES	YES	YES	YES
9	Item No:-9: 24 PORT L2 MANAGED POE ETHERNET SWITCH Qty- 3 Nos		GS728TPv2	DGS-1210-28P	DGS-3120-24PC	DGS-3120-24PC	Cisco SG350 28 P	DGS-1210-28P
a	Standard	IEEE 802.3 10 BASE-T/100 BASE TX/1000 BASE-E	YES	YES	YES	YES	YES	YES
b	Auto- Negotiation	YES	YES	YES	YES	YES	YES	YES
c	PoE Capable RJ45 Ports	24	YES	YES	YES	YES	YES	YES
d	PoE Standard	802.3af/802.3at	YES	YES	YES	YES	YES	YES
e	Additional Ports	Minimum 2 Nos of Additional SFP based uplink Ports	YES	YES	YES	YES	YES	YES
f	Switching Capacity	At least 48 Gbps	YES	YES	YES	YES	YES	YES
g	Transmission Method	Store and Forward	YES	YES	YES	YES	YES	YES
h	MAC Address Table	16K	NO	NO	YES	YES	YES	NO
i	Protocol Support	IPv4/IPv6	YES	YES	YES	YES	YES	YES
j	Capacity	4K VLAN	NO	NO	YES	YES	YES	NO

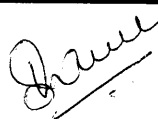
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Campw. MA)

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k	Status Indicators:	Port transmission speed, system, link/activity	YES	YES	YES	YES	YES	YES
l	Flash memory	32MB	NO	YES	YES	YES	YES	YES
l	Routing Protocol:	RIP, Static IP routing	YES	YES	YES	YES	YES	YES
n	Up Linking	Should have smooth up link capability with other Ethernet switch in the network.	YES	YES	YES	YES	YES	YES
o	Power Supply	Standard 230 V AC Supply	YES	YES	YES	YES	YES	YES
p	Environment	10 deg C to +40 deg C	YES	YES	YES	YES	YES	YES
q	Mounting	19 Inch Rack Mountable	YES	YES	YES	YES	YES	YES
r	Application Support	CCTV Surveillance and Access Control	YES	YES	YES	YES	YES	YES
s	Warranty	1 year	YES	YES	YES	YES	YES	YES
10	Item No:-10: 24 PORT L2 STACKABLE MANAGED POE ETHERNET SWITCH Qty- 1 Nos		GS728TXP S3300-28XP	DGS-1510-28X	DGS-3120-24PC	DGS-3120-24PC	Cisco SG350 28 P	DGS-1210-28P
a	Standard	IEEE 802.3 10BASE-T/100BASE TX/1000BASE-T	YES	YES	YES	YES	YES	YES
b	Auto- Negotiation	YES	YES	YES	YES	YES	YES	YES
c	PoE Capable RJ45 Ports	24	YES	YES	YES	YES	YES	YES
d	PoE Standard	802.3af/802.3at	YES	YES	YES	YES	YES	YES
e	Additional Ports	Minimum 2 Nos of Additional SFP based uplink Ports	YES	YES	YES	YES	YES	YES
f	Switching Capacity	At least 48 Gbps	YES	YES	YES	YES	YES	YES


3/3/2020





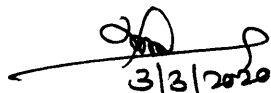
500295/2020/O/o APD(CALICUT)-SR

g	Transmission Method	Store and Forward	YES	YES	YES	YES	YES	YES
h	MAC Address Table	16K	YES	YES	YES	YES	YES	NO
i	Protocol Support	IPv4/IPv6	YES	YES	YES	YES	YES	YES
j	Capacity	4K VLAN	NO	YES	YES	YES	YES	NO
k	Stacking	Upto 4 Switches	YES	YES	YES	YES	YES	YES
l	Status Indicators:	Port transmission speed, system, link/activity	YES	YES	YES	YES	YES	YES
m	Flash memory	32 MB	YES	NO	YES	YES	YES	YES
n	Routing Protocol:	RIP, Static IP routing	YES	YES	YES	YES	YES	YES
o	Up Linking	Should have smooth up link capability with other Ethernet switch in the network.	YES	YES	YES	YES	YES	YES
p	Power Supply	Standard 230 V AC Supply	YES	YES	YES	YES	YES	YES
q	Environment	10 deg C to +40 deg C	YES	YES	YES	YES	YES	YES
r	Mounting	19 Inch Rack Mountable	YES	YES	YES	YES	YES	YES
s	Application Support	CCTV Surveillance and Access Control	YES	YES	YES	YES	YES	YES
t	Warranty	1 year	YES	YES	YES	YES	YES	YES
11	Item No:-11: MEDIA CONVERTER Qty- 4 Nos		GOMC-1312-SFP	DMC 300SC	DG MC 6123	DG-MC6123	AP-MCG-SMF-20K A	BN-1000MC SF
a	Media conversion	Ethernet to Optical Fiber.	YES	YES	YES	YES	YES	YES

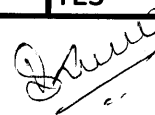
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b	Data Transmission rate range	From 10 Mbps to 1000Mbps.	YES	YES	YES	YES	YES	YES
c	Network Port	RJ45	YES	YES	YES	YES	YES	YES
d	Optical Port	SC and FC options. If option is not available, suitable patch code may be provided.	YES	YES	YES	YES	YES	YES
e	Number of Network Port	One Channel	YES	YES	YES	YES	YES	YES
f	Number of Optical Port	One Channel	YES	YES	YES	YES	YES	YES
g	Optical Specification	Single Mode, Single Core	YES	NO	YES	YES	YES	YES
h	Auto MDI/MDIX support on Ethernet port	YES	YES	YES	YES	YES	YES	YES
i	Distance	20 Km Minimum	YES	NO	YES	YES	YES	YES
j	Features	Link Pass –Through, Far-End Fault, Fiber Fault Alert, Loopback	YES	YES	YES	YES	YES	YES
k	Link, Activity & Speed LED indications	YES	YES	YES	YES	YES	YES	YES
l	Application Support	CCTV and Access Control	YES	YES	YES	YES	YES	YES
m	AC input voltage	PoE or Standard 230 V AC Supply or suitable DC with AC to DC adapter	YES	YES	YES	YES	YES	YES
n	Temperature	10 deg to 40 deg C	YES	YES	YES	YES	YES	YES



3/3/2020




Sandeep G

o	Humidity	90% or Better RH non condensing	YES	YES	YES	YES	YES	YES
p	Warranty	1 year	YES	YES	YES	YES	YES	YES
12	Item No:-12: SMART CARD READER CUM CONTROLLER AS A SINGLE DEVICE (WITH EM LOCK) Qty- 2 Nos		X990	REAL TIME T2D	DS-K1T105 M+DSK4 H	SC405	DS-K1T105 M+DSK4 H	S990A
a	Method	RFID	YES	NO BROCH URE	YES	YES	YES	YES
b	Card Capacity	2500 or More	YES		YES	YES	YES	YES
c	Transaction Storage	50000 or More	YES		YES	YES	YES	YES
d	Read Range	≤ 10 Cm	YES		YES	YES	YES	YES
e	CPU	64/32 Bit	YES		YES	YES	YES	YES
f	Identification Speed	≤ 1 Sec or Better	YES		YES	YES	YES	YES
g	Protocol Support	TCP/IP	YES		YES	YES	YES	YES
h	Ethernet Port(RJ 45): Speed	1:10/100M	YES		YES	YES	YES	YES
i	USB Port	1	YES		YES	YES	YES	YES
j	Power	The power to the device to be provided either from POE switch or from a suitable external DC source	YES		YES	YES	YES	YES
k	Display	LCD/TFT	YES		YES	YES	YES	YES

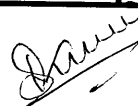
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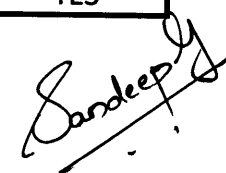
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i	Access control interface	EM Lock, Door sensor, Exit Button, alarm etc.	YES		YES	YES	YES	YES
m	Uploading of Transaction records	Transaction records to be uploaded automatically to a suitable database on a central computer for storage of records	YES		YES	YES	YES	YES
n	Card Programming	Access control cards should be programmable through the card based access control device installed.	YES		YES	YES	YES	YES
o	Temperature	10 deg C to +40 deg C or better	YES		YES	YES	YES	YES
p	Humidity	90% or Better	YES		YES	YES	YES	YES
q	Protection	Weather proof Protective cover to be provided if the access control device is installed outside the building.	YES		YES	YES	YES	YES
r	Certification	RoHS	YES		YES	YES	YES	YES
s	System Clock	Nonvolatile memory & RTC with option for interfacing with NTP/GPS clock	YES		YES	YES	YES	YES
t	EM LOCK		ESSL		DS-K4H250S	HP EL280D-5	DS-K4H250S	S 280S
i	Operating Power	DC power to be provided from the access device using CAT 5e/6 cable.	YES		YES	YES	YES	YES
ii	Holding Force	750 Lbs minimum	YES		YES	YES	YES	YES
iii	Mounting Type	Surface	YES		YES	YES		YES


3/8/2020





iv	Monitoring Option	Lock Status Sensor(LSS),LED Indicator	YES		YES	YES	YES	YES
u	Warranty	1 year	YES		YES	YES	YES	YES
13	Item No.13:SWITCH CONTROL EXIT READER Qty.:2 Nos.		ESSL SST28	REAL TIME	DS-K4H250S	ESSL ESM01	DS-K7P02	ESSL
a	Switch	On/Off, Push to operate switch with cable for connection with Controller	YES		YES	YES	YES	YES
b	Connectivity	To be connected with access control system	YES		YES	YES	YES	YES
c	Warranty	1 year	YES		YES	YES	YES	YES
14	Item No:-14: FINGER PRINT/SMART CARD READER CUM CONTROLLER AS A SINGLE DEVICE (with EM Lock) Qty- 2 Nos		ESSL X990	REAL TIME T28	DS-K1T201 MF	F18	DS-K1T201 MF	X990
a	Finger Print templates	2500 or more	YES	YES	YES	YES	YES	YES
b	Card Reader	Inbuilt (RFID)	YES	YES	YES	YES	YES	YES
c	Card Capacity	2500 or More	YES	YES	YES	YES	YES	YES
d	Transaction Storage	50000 or More	YES	YES	YES	YES	YES	YES
e	Read Range	≤ 10 Cm	YES	YES	YES		YES	YES
f	CPU	32 Bit	YES	YES	YES	YES	YES	YES
g	Identification Speed	≤ 1 Sec or Better	YES	YES	YES	YES	YES	YES
h	Protocol Support	TCP/IP	YES	YES	YES	YES	YES	YES

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i	Ethernet Port(RJ 45): Speed	1:10/100M	YES	YES	YES	YES	YES	YES
j	USB Port	1	YES	YES	YES	YES	YES	YES
k	Power	The power to the device to be provided either from POE switch or from a suitable external DC source	YES	YES	YES	YES	YES	YES
l	Display	LCD/TFT	YES	YES	YES	YES	YES	YES
m	Access control interface	EM Lock, Door sensor, Exit Door Reader, controller, alarm etc.	YES	YES	YES	YES	YES	YES
n	Uploading of Transaction records	Transaction records to be uploaded automatically to a suitable database on a central computer for storage of records	YES	YES	YES	YES	YES	YES
o	Finger print and Card Programming	The finger print and Access control cards should be programmable through the finger print cum card based access control device installed.	YES	YES	YES	YES	YES	YES
p	Temperature	10 deg C to +40 deg C	YES	YES	YES	YES	YES	YES
q	Humidity	90% or Better	YES	YES	YES	YES	YES	YES
r	Protection	Weather proof Protective cover to be provided if the access control device is installed outside the building.	YES	YES	YES	YES	YES	YES
s	Certification	RoHS	YES	YES	YES	YES	YES	YES

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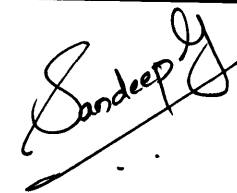
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t	System Clock	Nonvolatile memory & RTC with option for interfacing with NTP/GPS clock	YES	NO	YES	YES	YES	YES
u	EM LOCK		ALGATEC H 545	Evision	DS-K4H 250S	HF-EL280 D-5	DS-K4H250 S	S28S
i	Operating Power	DC power to be provided from the access device using CAT 5e/6 cable.	YES	YES	YES	YES	YES	YES
ii	Holding Force	750 Lbs minimum	YES	YES	YES	YES	YES	YES
iii	Mounting Type	Surface	YES	YES	YES	YES	YES	YES
iv	Monitoring Option	Lock Status Sensor(LSS),LED Indicator	YES	YES	YES	YES	YES	YES
v	Warranty	1 year	YES	YES	YES	YES	YES	YES
15	Item No:-15: EXIT DOOR READER CONTROLLER Qty- 2 Nos		ESSL F12	FT25	DS-K1201M F	F12	DS-K1201M F	F12
i	Finger Cum card based Access Control Exit Door Reader			NO BROCHURE				
a	Credential Support Type	Capable of reading smart card or Proximity Card(ISO) 14443 & Fingerprint	YES		YES	YES	YES	YES
b	Fingerprint Module	Optical ISO 19794-2 Compliant	YES		YES	YES	YES	YES
c	Fingerprint Sensor	500 dpi, Robust Aluminum Die cast enclosure with compact dimensions for rugged Industrial usage,IP65 or better	YES		YES	YES	YES	YES


03/03/2020




Sandeep Y

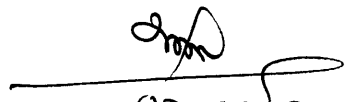
d	Protocol Support	TCP/IP	YES		YES	YES	YES	YES
e	Support	Capable of Interfacing with Controller for recording of event timing	YES		YES	YES	YES	YES
f	Power Supply	From Controller	YES		YES	YES	YES	YES
g	Detection	Tamper	YES		YES	YES	YES	YES
h	Warranty	1 year	YES		YES	YES	YES	YES
16	Item No:-16: 43 Inch 4K UHD LED DISPLAY Qty- 1 Nos		Panasonic LH-43QM1KD	Samsung QM43R	Panasonic LH-43QM1KD	Panasonic LH-43QM1KD	LG 43UU640C	INTEX LED-4302 FHD
a	Screen Size (Diag)/ Aspect Ratio	43 Inch/16:9	YES	YES	YES	YES	YES	YES
b	Picture Refresh rate	60 Hz	YES	YES	YES	YES	YES	YES
c	Resolution (HxV)	3840 x 2160 pixel 4 K UHD	YES	YES	YES	YES	YES	YES
d	Brightness(cd/m ²)	400 cd/m ²	YES	YES	YES	YES	YES	NO
e	Viewing Angle (Horizontal /Vertical)	178/178 ⁰	YES	YES	YES	YES	YES	YES
f	Response time	6ms(G to G)	YES	YES	YES	YES	YES	YES
g	HDMI in	HDMI 2.0 x1(4K@60Hz)	YES	YES	YES	YES	YES	YES
h	HDMI out	HDMI Connector x 1	YES	YES	YES	YES	YES	YES
i	Display Port In	Display Port x 1	YES	YES	YES	YES	YES	YES
j	DVI-D in	DVI-D 24-Pin x 1	YES	YES	YES	YES	YES	NO
k	USB	USB 3.0 x 1 USB 2.0 x1	YES	YES	YES	YES	YES	YES

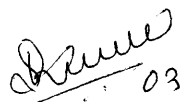
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	Orientation	Landscape/Portrait	YES	YES	YES	YES	YES	YES
m	Certification	RoHS	YES	YES	YES	YES	YES	YES
n	Operating Temperature	0 ⁰ C-40 ⁰ C	YES	YES	YES	YES	YES	YES
o	Operating Humidity	90% RH Non-Condensing	YES	YES	YES	YES	YES	YES
p	Warranty	1 year	YES	YES	YES	YES	YES	YES
17	CAT 6 UPT cable	Standard	YES	YES	YES	YES	YES	YES
18	Outdoor CAT 6 UPT cable	Standard	YES	YES	YES	YES	YES	YES
19	RJ 45 Connector	Standard	YES	YES	YES	YES	YES	YES
20	PVC casing/capping/flexi	Standard	YES	YES	YES	YES	YES	YES
	QUALIFIED /NOT		NO	NO	YES	YES	YES	NO


 03.03.2020
 Hameed MB
 DGM (Cen)


 03/03/2020
 Piusa M.D
 AGM CEN.


 Sandeep G
 Manager (Elec)
 3/3/2020