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**जवाहर विद्या मंदिर, श्यामली, राँची - 834002**

Date: 02.12.2024

**ADDENDUM-1**

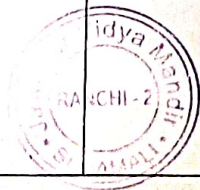
**Subject: Addendum-1 to JVM'S Tender No. JVM/OT-07/2024-25 dated 14.11.2024**

**Description: IP BASED CLOSED CIRCUIT VIDEO MONITORING (CCVM) SYSTEM  
AT  
JAWAHAR VIDYA MANDIR SHYAMALI**

**This addendum is being issued to introduce following changes in the Technical Specification of the subject tender:**

Clause No	Existing	To be read/ considered as
Clause No- 3.0, pt-No -2 (Scope of Work)	Network Video Recorders, Work Station Computer for NMS, Network Monitoring System & Software (NMS) with licenses, Network Switches, Ultra-Wide 65 Inch UHD LED TV with Wall Mounting arrangement, UPS and other components connected to the system.	Network Video Recorders, Work Station Computer, Network Switches, Ultra-Wide 65 Inch UHD LED TV with Wall Mounting arrangement and other components connected to the system.
Clause No- 3.0, Pt-No -6 (Scope of Work)	Supply, erection testing and commissioning of UPS as mentioned in the TS.	Erection, testing and Commissioning of Existing 20 kVA UPS along with battery bank. The shifting location is within school campus. To provide 3 pin switch socket as per requirement for input and output power supply. This will also include wiring of new cameras UPS supply and looping existing power supply.
Clause No- 4.0		However separate warranty equipment wise is mentioned in Addendum Technical Specification.

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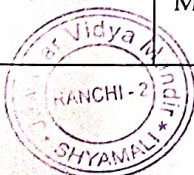


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Clause No- 6.0 TECHNICAL SPECIFICATION OF EQUIPMENT		Please check below Technical Specification
Clause No- 6.4		To be added:  Graphics Card should be included in PC.
Clause No- 6.5	QLED	LED
		Operational Hour- 16X7
Clause No- 6.8 (Power Supply Equipment)	<p>UPS power supply to be provided for all equipment in the control room i.e., NVRs, Operator station PC, LED display, Network switch &amp; it's associated devices.</p> <p>Uninterrupted Power Supply (UPS) system with independent battery bank will be provided. The UPS unit will be designed to support the full load condition of proposed system &amp; it's associated devices with 30% spare capacity.</p> <p>The backup battery set will be of sealed maintenance free lead-acid type (12V cells) with its AH capacity sufficient to supply continuous power to the complete system &amp; associated equipment at its full load capacity for at least 6 hours in case of AC mains failure with 30% spare capacity.</p> <p>Purchaser will arrange power supply feeders at Central Control Room. Supply of cable including termination at both ends and further distribution for the proposed system is in the scope of Tenderer</p>	Erection, testing and Commissioning of Existing 20 kVA UPS along with battery bank. The shifting location is within school campus. To provide 3 pin switch socket as per requirement for input and output power supply. This will also include wiring of new cameras UPS supply and looping existing power supply.
Clause No- 8.0 (List of Preferred makes)	Network Switch: Cisco, Hirschman, Moxa, Siemens, Net gear,	Network Switch: Cisco, Hirschman, Moxa, Siemens, Net gear, CP Plus, Digisol, D-Link



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	Network Management System: Intermapper, Cambium, Siemens	deleted
	Network Rack : Valrack/ Rittal/ HCL/ Schneider Electric	Network Rack : Valrack/ Rittal/ HCL/ Schneider Electric/Legrand/Netrack/CP Plus
	UPS system: Emerson / APC/ VERTIV/ FUJI/ HITACHI-HI- REL/SCHENIDER	REMOVED
	Battery: EXIDE/ HBL-NIFE/ AMAR RAJA/ AMCO-	REMOVED
		NEW ADDED: Makes for equipment not mentioned in the make list, prior approval may be taken before supply.
Clause No-9: Bill of Quantities	6.0 Managed Network Switch with 8 x PoE RJ45, 2 x SFP uplink ports	set 1
	6.0 Managed Network Switch with 8 x PoE RJ45, 2 x SFP uplink ports	set 2
	8.0 Network Switch with 4 x PoE RJ45, 4 x SFP uplink ports	set 1
	8.0 Network Switch with 4 x PoE RJ45, 4 x SFP uplink ports	set 0

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16.0	12 V Battery Bank 65 Ah with Stand	set	16
	17.0	5 KVA UPS Input & output Voltage 220V-240V AC Single Phase , 50 Hz	No 1
16.0	12 V Battery Bank 65 Ah with Stand	set	0
	17.0	5 KVA UPS Input & output Voltage 220V-240V AC Single Phase , 50 Hz	No 0

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Clause No-9: Bill of  
Quantities

New Clause Added:

22.0	SFP MODULE	Nos	35
23.0	Erection, testing and Commissioning of Existing 20 kVA UPS along with battery bank. The shifting location is within school campus. To provide 3 pin switch socket as per requirement for input and output power supply. This will also include wiring of new cameras UPS supply and looping existing power supply.	lot	1
24.0	Arrangement for viewing of all new cameras in Principal Office also apart from Server room.	lot	1

Clause No-9: Bill of  
Quantities

Revised BOQ is also attached  
herewith Separately.

New Clause:

OEM Authorization letter shall be  
submitted with tender documents  
for CCTV Camera, Network Video  
Recorder, Network Switch, Work  
station PC, LIU etc.

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**REVISED TECHNICAL SPECIFICATION:**

The technical Specification of Addendum shall supercede the earlier Technical Specification

**6.1 a. Day/Night IP HD Dome camera with IR (minimum 2 mega pixel): -**

Image Device	1/ 2.8" or better CMOS color sensor
Effective Pixel	1920X1080
Scanning System	Progressive
Resolution	2MP (1920 × 1080); 1.3MP (1280 × 960); 720P (1280 × 720); D1(704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 240/288)
Frame rate	Main Stream: 1920 × 1080 (1 fps-25/30 fps) Sub Stream: 704 × 576 (1 fps-25fps); 704 × 480 (1 fps-30fps)
Bit Rate	H.264: 32 K-10240 Kbps, H.265: 12 K-6400 Kbps
Audio	In built mic
Storage	Micro SD card supported upto 256 GB
Cyber Security	Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; IP/ MAC filtering; Generation and importing of X.509 certification; syslog;HTTPS;802.1x;Trusted boot; Trusted execution; Trusted upgrade
WDR	120 dB
Weather Proof standard	IP67 & IK10
IR Range	Greater than 30 mtrs
Protocol	HTTP; HTTPS; TCP; ARP; RTSP; RTP; RTCP; UDP; SMTP; FTP; DHCP; DNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; SFTP; IEEE802.1x; ICMP; IGMP; ONVIF (Profile S/Profile G); CGI
Warranty	2 years

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Image Device	1/ 2.8" or better CMOS color sensor
Effective Pixel	1920X1080
Scanning System	Progressive
Resolution	2MP (1920 × 1080); 1.3MP (1280 × 960); 720P (1280 × 720); D1(704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 240/288)
Frame rate	Main Stream: 1920 × 1080 (1 fps-25/30 fps) Sub Stream: 704 × 576 (1 fps-25fps); 704 × 480 (1 fps-30fps)
Bit Rate	H.264: 32 K-10240 Kbps, H.265: 12 K-6400 Kbps
Audio	In built mic
Storage	Micro SD card supported upto 256 GB
Cyber Security	Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; IP/ MAC filtering; Generation and importing of X.509 certification; syslog;HTTPS;802.1x;Trusted boot; Trusted execution; Trusted upgrade
WDR	120 dB
Weather Proof standard	IP67
IR Range	Greater than 30 mtrs
Protocol	HTTP; HTTPS; TCP; ARP; RTSP; RTP; RTCP; UDP; SMTP; FTP; DHCP; DNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; SFTP; IEEE802.1x; ICMP; IGMP; ONVIF (Profile S/Profile G); CGI
Warranty	2 years

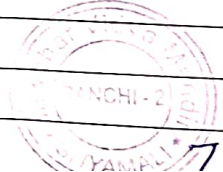
**6.2 Network Video Recorder**

	Specification
Network Video Recorder	With Pre loaded VMS
Processor	Intel i5-6600, 64 bits 4 core processor
IP Camera Input	As required
Operating System	Embedded LINUX
Two-way Talk	1 channel Input, 1 channel Output, RCA
User Interface	GUI

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Video Interface	Output/	3 HDMI, 1 VGA
Video Resolution		3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768
Video Display Split		1/4/8/9/16/25/36
Compression		Smart H.265+/H.265/Smart H.264+/H.264/MJPEG/MPEG4
OSD		Camera title, time, Video Loss, Camera lock, Motion Detection, Recording
Hard Disk		MINIMUM Support 15 HDD disks (3.5), the offered HDD capacity considering 15 days of video storage along with calculation.
Disk Interface		15 SATA ports with each should support 10TB
Smart Phone		iPhone, iPad, Android Phone
Trigger Events		Recording, PTZ, Tour, Alarm out, Video Push, Email, FTP, Snapshot, Buzzer & Screen tips
Recording Mode		Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Tampering, Video Loss), Stop
Search Mode		Time/Date, Alarm, MD & Exact search (accurate to second), Smart search
Multi-channel Playback		1/4/9/16
Playback Function		Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom
Record Interval		1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
Backup Mode		USB Device/Network; Internal SATA Burner
Interface Ports		2 USB (1 rear USB 3.0; 1 front USB 2.0)
Max User Account		128 users
Ethernet		2 RJ-45 10/100/1000 Mbps self-adaptive Ethernet ports
Protocols		HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter ;DDNS; FTP; Alarm Server; IP Search, P2P, ONVIF (profile T/S/G); CGI; SDK
Power Supply		AC 100~240V, 50/60 Hz
Power Consumption		Vendor to specify
Working Temp		-10 ~+55°C / 10~90%RH / 86~106kpa
Warranty		2 years

**6.3 PoE Switch****A. 24 Port PoE Managed Network Switch**

Sl. No.	Parameter	Specification
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1.	PoE Ports	24 ports with 10/100/1000Mbps: RJ45 ports:
2.	Uplink Ports	2 Uplink port, 1000Mbps RJ45 ports & 2 Gigabit SFP ports.
3.	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, IEEE 802.3af PoE, IEEE 802.3at PoE, IEEE 802.3az
4.	Performance	Switching capacity: 40 Gbps or better Forwarding performance (64-byte packet size): 38.69 Mpps or higher
5.	Certification	CE, FCC, UL listed
6.	Surge Protection	To be provided both for Common and differential mode.
7.	LED	Must have: Per port speed, Link, Activity
8.	Mounting	Should be rack mounted
6	Warranty	02 years

**B. 16 Port PoE Managed Network Switch**

Sl. No.	Parameter	Specification
1.	PoE Ports	16 ports with 10/100/1000Mbps: RJ45 ports:
2.	Uplink Ports	2 Uplink port, 1000Mbps RJ45 ports & 2 Gigabit SFP ports.

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3.	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, IEEE 802.3af PoE, IEEE 802.3at PoE, IEEE 802.3az
4.	Performance	Switching capacity: 40 Gbps or better Forwarding performance (64-byte packet size): 29.76 Mpps or higher
5.	Certification	CE, FCC, UL listed
6.	Surge Protection	To be provided both for Common and differential mode.
7.	LED	Must have: Per port speed, Link, Activity
8.	Mounting	Should be rack mounted
6	Warranty	02 years

**C. 8 Port PoE Managed Network Switch**

Sl. No.	Parameter	Specification
1.	PoE Ports	8 ports, 1000Mbps: RJ45 ports:
2.	Uplink Ports	2 Uplink port, 1000Mbps RJ45 ports & 2 1000Mbps SFP ports.
3.	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, IEEE 802.3af PoE, IEEE 802.3at PoE, IEEE 802.3az
4.	Performance	Switching capacity: 20 Gbps or better Forwarding performance (64-byte packet size): 14.8 Mpps or higher

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5.	Certification	CE, FCC, UL listed
6.	Surge Protection	To be provided both for Common and differential mode.
7.	LED	Must have: Per port speed, Link, Activity
8.	Mounting	Should be rack mounted
6	Warranty	02 years

**6.9 6 Core SM OFC Cable:**

SR. NO.	SPECIFICATION/QUALITATIVE REQUIREMENT
1	06/08/12/24-Core, Single mode 9/125 micron primary coated buffers, 10G Ethernet OS2, Armored Loose Tube, ECCS (Electrolytic Chrome Coated Steel) Tape, Jelly Filled Loose Tube.
2	Two Steel Wires/Rods embedded in outer periphery of the jacket as strength members. UV Stabilised jacket and protected from Rodent attacks
3	Complying to ANSI/TIA-568-C.3, ISO/IEC 11801, Tele Cordia GR-20 Core, ITU-T REC G.652D, IEC 60793-1/60794-1, EN 50173, RoHS Compliant
4	Suitable for use in indoor/outdoor ducts, direct burial and backbone cabling
5	Loose tube material : Polybutylene Terephthalate (PBT) with Natural/White Colour having Inner Diameter/Outer Diameter 1.7/2.5 $\pm$ 0.1 mm
6	Peripheral strength member as two steel wires/rods having dimensions as 0.6 $\pm$ 0.05 mm
7	Moisture Barrier as Water Swell able Tape, Armoring $\geq$ 0.150 mm (ECCS Tape), Number of Ripcords as 01 no polyester based yarns.
8	Outer sheath material as HDPE/LSZH with diameter as 7.5/8.5 $\pm$ 0.5 mm having thickness of 1.5mm nominal
9	Weight of the cable for 04/06/08/12 core (HDPE/LSZH): 65.0/75.0 $\pm$ 10 kg/km, for 24 core (HDPE/LSZH): 75.0/95.0 $\pm$ 5 kg/km
10	Fiber colour and Loose tube colour as per ANSI/TIA standards.
11	Tensile Strength : 1000 N, Crush Resistance : 4000 N/100mm
12	Minimum bend radius : 20 x Diameter (during installation), Minimum bend radius : 10 x Diameter (during full load)
13	Fiber Type : G. 652D (OS2)

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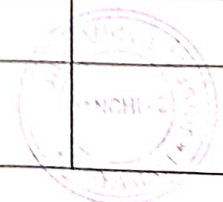
**9.0 BILL OF QUANTITIES:**

**A. Supply of Materials:**

Sl No	Description	Unit	Qty	Unit Price (In Rs)	Total Price (In Rs)	Total Price With (GST) (In Rs)
1.	2MP, IR IP Vandal Proof Dome Camera as per TS/Addendum.	Nos	60			
2.	2MP IR IP H.265 Bullet Camera as per TS/Addendum.	Nos	12			
3.	128Ch Embedded Network Video Recorder Supports 4K Cameras, HDMI, VGA, RAID, Smart Analytics and ONVIF.	Nos	1			
4.	Managed Network Switch with 24 x PoE RJ45, 2 x SFP uplink ports.	set	3			
5.	Managed Network Switch with 16 x PoE RJ45, 2 x SFP uplink ports.	set	3			
6.	Managed Network Switch with 8 x PoE RJ45, 2 x SFP uplink ports.	set	2			
7.	Workstation PC	set	1			
8.	Network Switch with 4 x PoE RJ45, 4 x SFP uplink ports	set	0			
9.	65 Inch LED Display along with Wall mounted accessories and HDMI Cable	set	1			
10.	Shielded RJ 45 Connectors	Nos	150			
11.	Fully loaded 6 ports SC type LIU Box with two glands ports	set	8			
12.	Cat-6 shielded cable	metres	2000			
13.	6 Core Single Mode shielded OFC Cable	metres	500			

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14.	Single Mode SC to SFP Patch Cords	Nos	15			
15.	3 Core Shielded Power Cable	metres	500			
16.	12 V Battery Bank 65 Ah with Stand	set	16			
17.	5 KVA UPS Input & output Voltage 220V-240V AC Single Phase , 50 Hz	No	1			
18.	PVC Electrical Casing	metres	400			
19.	Wall mount 4 U Rack along with PDB Box	set	7			
20.	Floor mount 12 U Rack along with PDB Box	set	1			
21.	PVC/Gang Box, Flexible Conduit, and Other Materials for Installation of Camera.	lot	1			
22.	SFP Module	Nos	35			
23.	Erection, testing and Commissioning of Existing 20 kVA UPS along with battery bank. The shifting location is within school campus. To provide 3 pin switch socket as per requirement for input and output power supply. This will also include wiring of new cameras UPS supply and looping existing power supply.	lot	1			
24.	Arrangement for viewing of all new cameras in Principal Office also apart from Server room.	lot	1			
<b>TOTAL (WITHOUT GST)</b>						
<b>TOTAL (WITH GST)</b>						

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**B. Installation Testing and Commissioning**

SI No	Description	Unit	Qty	Unit Price (In Rs)	Total Price (In Rs)	Total Price With(GST) (In Rs)
1.	Installation Testing and Commissioning on turnkey basis as per Scope of work	lot	1			
TOTAL (WITHOUT GST)						
TOTAL (WITH GST)						

**GRAND TOTAL (A+B) (WITHOUT GST) –**

**GRAND TOTAL (A+B) (WITH GST) –**

All other terms & conditions of tender enquiry as well as addendums (if any) shall remain unchanged till further notification.

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**(Samarjit Jana)**  
**Principal**

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