

YADAVINDRA PUBLIC SCHOOL, PATIALA
REQUEST FOR QUOTATION (RFQ) & TECHNICAL SPECIFICATION

Supply, Installation, Testing & Commissioning of CCTV IP Cameras (Indoor Dome & Outdoor Models)

1. Scope of Work

The selected vendor shall be responsible for the supply, delivery, installation, testing, and commissioning of CCTV IP Cameras, including all requisite accessories, in strict compliance with the technical specifications herein.

The vendor shall further provide:

- On-site installation and commissioning,
- Operational training for designated staff,
- Original Equipment Manufacturer (OEM) warranty,
- After-sales support including firmware/software updates in line with manufacturer guidelines.

2. Equipment to be Supplied

Indoor Dome IP Camera

- Model: SP-C2XN-13 (2 MP IP Dome Camera, Colour Master Series)
- Features: 30M IR illumination, integrated audio, 2.8 mm fixed lens

Outdoor IP Camera

- Model: SP-C2XN-13W (2 MP Outdoor IP Camera)

3. General Technical Specifications (Applicable to Both Indoor & Outdoor Models)

Parameter	Specification
Image Sensor	Progressive Scan CMOS, min. 1/2.7", resolution ≥ 2 MP (1920×1080); higher resolutions (4MP/5MP) acceptable if cost-effective
Effective Pixels	$\geq 1920 \times 1080$ pixels
Lens	Fixed lens 2.8 mm / 3.6 mm; optional varifocal / motorized zoom (2.7–12 mm or equivalent). Vendor to specify FOV (H/V/D)
Video Compression	H.265 / H.265+ preferred; backward compatible with H.264; dual streaming
Frame Rate	Full HD (1920×1080) @ 25/30 fps
Day/Night Function	ICR (IR Cut Removable filter), Auto/Manual

IR Illumination	≥30 m (Indoor), ≥50 m (Outdoor)
Minimum Illumination	Color ≤0.05 lux @ F1.6; B/W ≤0.01 lux @ F1.6; 0 lux with IR
Dynamic Range	True WDR ≥120 dB or DWDR equivalent
Noise Reduction	2DNR / 3DNR
Image Enhancements	BLC, HLC, Defog, EIS (if available), ROI, Privacy Masking
Audio	Built-in microphone (Indoor); support line-in/line-out; two-way audio optional
Network Protocols	ONVIF (Profile S/T), TCP/IP, UDP, HTTP/HTTPS, RTP/RTSP, DHCP, NTP, SNMP, IPv4/IPv6
Cyber Security	Password protection, user access levels, HTTPS/SSL encryption, firmware upgradeable
Local Storage	MicroSD slot, ≥128 GB (preferably 256 GB/512 GB)
Power Supply	PoE IEEE 802.3af/at and/or 12 VDC ±10%; vendor to specify power consumption
Operating Temperature	Indoor: -10 °C to +50 °C; Outdoor: -20 °C to +60 °C
Ingress Protection	Outdoor: IP66/IP67; Indoor: IP66 (preferred for exposed conditions)
Vandal Resistance	IK10 (for dome housing, if applicable)
Surge Protection	Lightning protection ≥4 kV
Housing Material	Metal/polycarbonate; weather-resistant finish
Mounting Accessories	Wall/ceiling mounts, junction boxes, sealed connectors
Certifications	CE, FCC, RoHS, UL/ETL (where applicable), ONVIF compliance
Warranty	Min. 01 year OEM warranty; extendable options available
After-Sales Support	Local service, firmware updates, spares for min. 05 years

4. Specific Indoor Dome Camera (Comparable Model: Dahua DH IPC HDW1230T2)

- **Resolution: 2 MP (1920×1080) @ 25/30 fps**
- **Lens: 2.8 mm fixed, ~102° Horizontal FOV**
- **IR Distance: ≥30 m**
- **Min. Illumination: 0.01 lux (Color), 0.001 lux (B/W), 0 lux (IR on)**
- **Protection: IP66**
- **Power: PoE (802.3af) / 12 VDC**

5. Specific Outdoor Camera Requirements

- **Resolution:** ≥ 2 MP (1920×1080) @ 25/30 fps
- **IR Range:** ≥ 50 m
- **Lens:** Fixed 2.8 mm or motorized varifocal
- **Environmental:** IP66 / IP67; -20°C to $+60^{\circ}\text{C}$; UV/dust/rain/snow resistant
- **Housing:** Rugged metal; vandal resistant (IK10 preferred)
- **Surge Protection:** ≥ 4 kV lightning protection; earthing mandatory
- **Accessories:** Waterproof cable glands, junction boxes, wall mounts, sun/rain shields

6. Quotation Submission Requirements

Vendors shall submit sealed quotations in the following format:

1. OEM name & model number (attach datasheet/brochure)
2. Unit Price (INR) inclusive of GST, freight, insurance, delivery to YPS Patiala
3. Installation & Commissioning charges (if any)
4. Warranty & AMC/extended warranty options (with local service details)
5. Confirmation of supply & installation within ≤ 10 days
6. List of included accessories (brackets, PoE injectors/switches, connectors, patch cords, etc.)
7. Optional features/add-ons with pricing (e.g., higher resolution, motorized zoom, analytics)
8. Power consumption (typical & maximum, in watts)
9. Certifications (CE/FCC/UL/ONVIF etc.)

7. CCTV Camera Installation Plan

Sr. No.	Location	Item	Qty	Remarks
1	Senior School Classrooms	IP Camera – Indoor Dome	16	HD with night vision
2	Middle School Classrooms	IP Camera – Indoor Dome	4	Corridors/entry points
3	Gate Nos. 1, 3 & 4 (Outdoor)	IP Camera – Outdoor	6	External security
4	Resource Room (Junior School)	IP Camera – Indoor Dome	2	Sensitive areas

5	BSA Store Room	IP Camera – Indoor Dome	1	Asset monitoring
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8. Terms & Conditions

- **Delivery, installation, testing, and commissioning must be completed within 10 days of Purchase Order.**
- **All equipment supplied must be new, genuine, OEM-sealed (no refurbished/grey-market units).**
- **Vendor must ensure compatibility with ONVIF-compliant NVRs & third-party VMS.**
- **Payment Terms: [Institution's standard terms, e.g., 70% on delivery, 30% post-installation/testing].**
- **Penalty: Delays beyond 10 days shall attract liquidated damages at 2% of order value per day (subject to maximum as per applicable law).**
- **Jurisdiction: All disputes shall be subject to the exclusive jurisdiction of competent courts at Patiala, Punjab.**

Submission Deadline

Sealed quotations must be submitted on or before 20/09/2025 at the office of the undersigned.