

SPECIFICATION

Supply, Installation, Testing & Commissioning of IP CCTV Surveillance System Oushadhi Factory, Kuttanellur

Estimated Value: ₹5,00,000/- (Rupees Five Lakh only)

1. Scope of Work

- Supply, installation, testing and commissioning of a complete IP-based CCTV surveillance system Oushadhi Factory, Kuttanellur
- Supply and installation of IP CCTV cameras, PoE/network switches, Cat6 cabling and necessary accessories.
- Underground/outdoor fibre/network cabling wherever required, including routing, termination, protection and testing.
- Installation, configuration, camera alignment, network configuration, testing, commissioning and handover.
- Integration with existing CCTV/NVR/VMS infrastructure wherever applicable.
- Training of designated personnel and submission of test reports, as-built documentation and configuration details.

2. Camera & Switch Requirement

Sl. No.	Department / Location	Camera Qty	Switch Qty	Switch Type / Ports
1	Factory, Packing	15	—	—
2	PM Store	15	1	16 Port
3	Front Gate	5	1	16 Port
4	KC, RM & Engineering Store	8	1	24 Port
5	R&D	4	—	—
6	COE	—	1	24 Port
7	Chipper	—	1	16 Port
TOTAL		47 Cameras	5 Switches	16/24 Port

3. Detailed BOQ

Sl. No.	Description	Qty.
1	IP CAM CP+ IR DOME – CP-UNC-VC41L5C-VMD-LQ	16 Nos.
2	IP CAM CP+ IR BULLET – CP-UNC-TC41L5C-VMD-LQ-0360	31 Nos.
3	TL-SG2428P JetStream 24-Port	2 Nos.
4	TP-Link ES220GMP – 16 Port	3 Nos.
5	Cable & Cabling with all accessories per metre – Cat6 cable included	1 Lot
6	Underground Cabling / Outdoor Fiber Cabling – OFC Cable not required	1 Lot
7	One-Time Implementation Charges	1 Job

4. Technical Specifications

- IP cameras shall be CP PLUS or approved equivalent and shall conform to the technical specifications of the quoted model/manufacture datasheet.
- Dome Camera: CP-UNC-VC41L5C-VMD-LQ – 16 Nos.
- Bullet Camera: CP-UNC-TC41L5C-VMD-LQ-0360 – 31 Nos.
- Cameras shall support day/night operation, IR illumination, suitable video compression, network transmission, motion/video detection and remote configuration, as applicable to the quoted model.
- Cameras shall be suitable for continuous 24×7 operation and appropriate environmental conditions at the installation location.
- Any deviation from the specified make/model/specification shall be clearly stated by the bidder.

5. Network Switches

- Proposed switches: TL-SG2428P JetStream 24-Port – 2 Nos.; TP-Link ES220GMP 16-Port – 3 Nos.

- Switches shall be suitable for IP CCTV applications and shall have adequate PoE capacity, switching capacity and uplink connectivity for the connected cameras.
- The contractor shall ensure that the PoE budget, uplink bandwidth and port availability are adequate for the complete system.
- Network segmentation/VLAN configuration shall be implemented wherever required by the organization's IT section.

6. Cabling & Accessories

- Cat6 UTP cable and all required accessories shall be supplied and installed as a complete system.
- Rates shall include connectors, patch cords, termination accessories, conduits/trunking, junction boxes, fixing materials, labels and testing, wherever required.
- Cables shall be properly routed, dressed, secured and labelled at both ends. Unnecessary joints shall be avoided.
- Outdoor/underground routes shall use suitable protective arrangements. Existing utilities shall be identified before excavation.
- All wall/ceiling penetrations shall be properly sealed after installation.

7. Installation Conditions

- Camera locations shall be finalized in consultation with the department before drilling/fixing.
- Camera field of view, height and angle shall be optimized to provide the required surveillance coverage and minimize blind spots.
- Outdoor cameras shall be suitably protected from rain, dust and environmental exposure.
- Camera installation shall avoid glare, direct sunlight and IR reflection from nearby surfaces.
- All equipment shall be securely mounted and cables shall not be left loose or exposed to avoidable mechanical damage.
- Network and power cabling shall be suitably separated where required.

8. Testing & Commissioning

- Every camera and network link shall be individually tested before final acceptance.
- Camera tests shall include power/PoE, live view, image clarity, day/night operation, IR, field of view, motion/video detection and recording/playback wherever applicable.
- Network tests shall include cable continuity, termination, link speed, packet loss/connectivity, PoE availability, switch uplinks and fibre links wherever applicable.
- System shall be demonstrated to the authorized representative before acceptance.

9. Testing & Commissioning Report

- A camera-wise testing report shall be submitted showing camera ID, location, IP address, cable test, live view, recording, IR and final status.
- All defects identified during testing shall be rectified by the contractor before commissioning is certified.

10. Acceptance Criteria

- The system shall be accepted only after all 47 cameras are installed and functioning satisfactorily.
- All required network links, switches, recording functions and viewing angles shall be verified.
- Cabling shall be complete, properly dressed and labelled.
- Required documentation and test reports shall be submitted.
- Final acceptance shall be based on successful demonstration and certification by the authorized representative.