Camera Specifications for CCTV Installation

4MP PTZ Camera Specifications

General Features

- **Image Sensor**: 1/2.8" STARVIS™ CMOS or similar.
- **Resolution**: 4MP (2560 x 1440 pixels).
- **Optical Zoom**: 25x or more for detailed monitoring.
- **Min. Illumination**:
    - **Color**: 0.003 lux @ F1.6.
    - **Black & White**: 0.0005 lux @ F1.6 (IR on).
- **Wide Dynamic Range (WDR)**: 120dB for balanced lighting in high-contrast environments.
- **Day/Night Mode**: Auto switch with IR-cut filter (ICR).
- **Focal Length**: 4.8mm to 120mm, supporting various viewing angles.
- **Aperture**: F1.6 – F4.0 for better low-light performance.
- **Illumination Range**: IR illumination up to 30m or more.

Video and Smart Features

- **Video Compression**: H.265+/H.265/H.264+/H.264/MJPEG.
- **Frame Rate**: Up to 30fps @ 4MP.
- **Smart Features**:
    - Intrusion detection, line crossing detection.
    - Human and vehicle classification for alarms.
    - People counting for crowd density analysis.

PTZ Features

- **Pan/Tilt Range**:
    - Pan: 0° to 360° continuous rotation.
    - Tilt: -15° to 90° with auto-flip.
- **Presets**: Up to 300.
- **Speed**: Pan speed up to 200°/s, tilt up to 120°/s.

Connectivity and Storage

- **Network**: RJ45, supports IPv4/IPv6, ONVIF profiles S, G, T.
- **Storage**: Support for MicroSD cards, NAS, and FTP.
- **Power Supply**: DC12V or PoE+ (IEEE 802.3at).

8MP Bullet Camera Specifications

General Features

- **Image Sensor**: 1/1.8" CMOS or better.
- **Resolution**: 8MP (3840 x 2160 pixels, 4K).
- **Min. Illumination**:
  - **Color**: 0.005 lux @ F1.4 for excellent low-light performance.
- **Wide Dynamic Range (WDR)**: 120dB.
- **Focal Length**: Fixed or varifocal lens options.
- **Illumination**: Built-in IR illuminators with a range up to 100m or more.

Video and Smart Features

- **Video Compression**: H.265+/H.265/H.264+/H.264.
- **Frame Rate**: Up to 30fps @ 8MP.
- **Smart Features(Not Mandatory)**:
  - Face recognition, license plate recognition.
  - Line crossing and intrusion detection.
  - Vehicle model and color detection.

Construction and Environment

- **Housing**: IP66/IP67-rated for weatherproof performance.
- **Operating Temperature**: -40°C to 70°C.
- **Power Supply**: DC12V or PoE (IEEE 802.3af).

Connectivity and Storage

- **Network**: RJ45, ONVIF support.
- **Storage**: Support for MicroSD cards, NAS, and FTP.