# 2 MP PTZ Network Camera

## 2MP 12x PTZ Network Camera

- 1/2.7-in. 2 MP CMOS Imager
- Powerful 12x Optical Zoom
- Support Triple-streams Encoding
- Maximum 1080p at 30 fps, 720p at 30/60 fps
- Intelligent Video System (IVS)
- Support PoE+
- IK10
- Five-year Warranty

**WDR** | **ICR D/N** | **Vandal-proof** | **PoE+**

## System Overview

Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, the SD42C series PTZ camera can provide large monitoring range and great detail. The camera delivers 1080P resolution at 30 fps, with 12x optical zoom. SD42C series PTZ is equipped with quick and smooth control, high quality image and good protection, which make it can meet most of the requirements of video surveillance applications.

## Functions

Smart H.264+
Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.

Wide Dynamic Range
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Environmental
With a temperature range of -30 °C to +60 °C (-22 °F to +140°F), the camera is designed for extreme temperature environments. The camera complies to an IK10 impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force.

Protection
This camera suits even the harsh conditions for outdoor applications. Its 2KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.

**ONVIF** **PSIA**

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.7-in. CMOS |
| Effective Pixels | 1920(H) x 1080(V), 2 MP |
| RAM/ROM | 256 MB / 128 MB |
| Scanning System | Progressive |
| Minimum Illumination | Color: 0.05 Lux at F1.6; B/W: 0.005 Lux at F1.6 |
| S/N Ratio | More than 55 dB |

### Lens

| | |
|---|---|
| Focal Length | 5.1 mm to 61.2 mm |
| Max. Aperture | F1.6 to F3.0 |
| Angle of View | H: 59.3° to 5.2° |
| Optical Zoom | 12x |
| Focus Control | Auto,Manual |
| Close Focus Distance | 100 mm to 1000 mm |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan: 0° to 360° endless; Tilt: -2° to 90°,auto flip 180° |
| Manual Control Speed | Pan: 0.1° to 300° /s; Tilt: 0.1° to 120° /s |
| Preset Speed | Pan: 300° /s; Tilt: 200° /s |
| Presets | 300 |
| PTZ Mode | 5 Pattern, 8 Tour, Auto Pan, Auto Scan |
| Speed Setup | Human-oriented focal Length, speed adaptation |
| Power up Action | Auto restore to previous PTZ and lens status after power failure |
| Idle Motion | Activate Preset, Scan, Tour, Pattern if there is no command in the specified period |
| Protocol | DH-SD |

### Video

| | | |
|---|---|---|
| Compression | | Smart H.264+, H.264, MJPEG |
| Streaming Capability | | 3 Streams |
| Resolution | | 1080p (1920 × 1080), 720p (1280 × 720), D1 (704 × 480), CIF (352 × 240) |
| Frame Rate | Main Stream | 1080p/D1 at 30 fps, 720p at 60 fps |
| | Sub Stream 1 | D1/CIF at at 30fps |
| | Sub Stream 2 | 720P/D1/CIF at 30 fps |

| | |
|---|---|
| Bit Rate Control | CBR, VBR |
| Bit Rate | Smart H.264+, H.264: 448 K to 8192 Kbps, MJPEG: 5120 K to 10240 Kbps |
| Day/Night | Auto (ICR), Color, B/W |
| Backlight Compensation | BLC, HLC, WDR (120 dB) |
| White Balance | Auto, ATW, Indoor, Outdoor, Manual |
| Gain Control | Auto, Manual |
| Noise Reduction | Ultra DNR (2D/3D) |
| Motion Detection | Support |
| Region of Interest | Support |
| Defog | Support |
| Digital Zoom | 16x |
| Flip | 180° |
| Privacy Masking | Up to 24 areas |

### Audio

| | |
|---|---|
| Compression | G.711a, G.711mu, PCM |

### Network

| | |
|---|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x1x |
| Interoperability | ONVIF, PSIA, CGI |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 20 users |
| Edge Storage | NAS (Network Attached Storage), Local PC for instant recording, 128GB |
| Web Viewer | IE 10, Firefox, Safari |
| Management Software | Smart PSS, DSS |
| Mobile Operating System | IOS, Android, Windows Phone |

### Certifications

| | |
|---|---|
| Certifications | CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1 |

### Interface

| | |
|---|---|
| Audio Interface | Input: One (1) Channel Output: One (1) Channel |
| Alarm | Input: Two (2) Channel Output: One (1) Channel |

### Electrical

| | |
|---|---|
| Power Supply | 24 VAC, 1.5 A (±10%), PoE+ (802.3at) |
| Power Consumption | 12 W |

## Environmental

| | |
|---|---|
| Operating Conditions | -30°C to 60°C (-22°F to +140°F), Less than 90% RH |
| Vandal Resistance | IK10 |

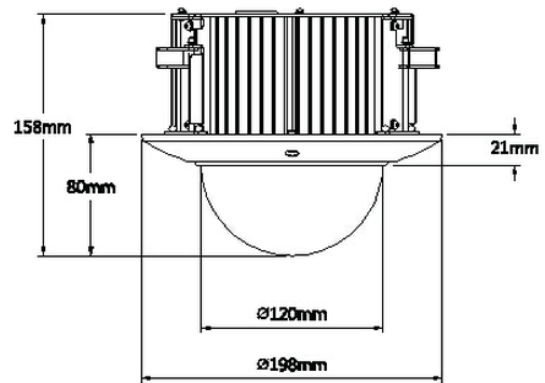## Construction

| | |
|---|---|
| Casing | Metal |
| Dimensions | Φ198.0 mm × 158.0 mm (7.80 in. x 6.22 in.) |
| Net Weight | 2.30 kg (5.07 lb) |
| Gross Weight | 3.30 kg (7.28 lb) |

## Intelligence

IVS triggers an alarm and takes a defined action for the following events:

| | |
|---|---|
| Standard Features | • Tampering with the camera.<br>• Error writing to an onboard Micro SD card.<br>• Error sending or receiving data over the network.<br>• Unauthorized access to the camera. |
| **Premium Features** | |
| Motion | An object moves through any part of the scene. |
| Tripwire | A target crosses a user-defined line. |
| Intrusion | A target enters or exits a defined perimeter. |
| Abandoned/Missing Object | A target leaves an object in designated area, or a target removes an object from the same designated area. |
| **Advanced Features** | |
| Facial Detection | Detects and captures a snapshot of a human face in a defined area within a scene. |

## Dimensions (mm)



## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| 2 MP PTZ Camera | DH-SD42CA212TN-HNI | 2 MP 12x PTZ Network Camera, WDR, IVS |
| Accessories | AC24V/1.5A | Power Supply |

## Accessories

Included:



AC24V/1.5A
Power Supply