

# DH-SD40A212TN-HN(I)

## 2MP 12x PTZ Network Camera



- 1/2.7" 2Megapixel CMOS
- Powerful 12x optical zoom
- Support Triple-streams encoding
- Max. 30fps@1080P, 30/60fps@720P
- IVS(Optional)
- Support PoE+
- IP66, IK10



### System Overview

Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, the SD40 series PTZ camera can provide large monitoring range and great detail. The camera delivers 1080P resolution at 30 fps, with 12x optical zoom. SD40 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 (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

#### Environmental

With a temperature range of -40 °C to +60 °C (-40 °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. Subjected and certified to rigorous dust and water immersion tests, the IP66 rating makes it suitable for demanding outdoor applications.

#### Protection

This camera suits even the harsh conditions for outdoor applications. Its 6KV 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.

## Technical Specification

### Camera

|                      |   |
|----------------------|---|
| Image Sensor         | 1/2.7" CMOS                             |
| Effective Pixels     | 1920(H) x 1080(V), 2 Megapixels         |
| RAM/ROM              | 256M/128M                               |
| Scanning System      | Progressive                             |
| Minimum Illumination | Color: 0.05Lux@F1.6; B/W: 0.005Lux@F1.6 |
| S/N Ratio            | More than 55dB                          |
| IR Distance          | N/A                                     |
| IR On/Off Control    | N/A                                     |
| IR LEDs              | N/A                                     |

### Lens

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

### PTZ

|                      |   |
|----------------------|---|
| Pan/Tilt Range       | Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°                             |
| Manual Control Speed | Pan: 0.1° ~ 300° /s; Tilt: 0.1° ~ 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   |

### Intelligence(optional)

|                |  |
|----------------|--|
| Auto Tracking  | N/A  |
| IVS (optional) | Tripwire, Intrusion, Abandoned/Missing, Face Detection |

### Video

|                      |             |  |
|----------------------|-------------|--|
| Compression          |             | H.264+/H.264 / MJPEG   |
| Streaming Capability |             | 3 Streams  |
| Resolution           |             | 1080P(1920×1080)/720P(1280×720)/<br>D1(704×576/704×480)/CIF(352×288/352×240) |
| Frame Rate           | Main stream | 1080P/ D1 (1 ~ 25/30fps), 720P(1~50/60fps)                                   |
|                      | Sub stream1 | D1/CIF(1 ~ 25/30fps)   |
|                      | Sub stream2 | 720P/D1/ CIF (1 ~ 25/30fps)  |

### Bit Rate Control

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

### Audio

|             |                                    |
|-------------|------------------------------------|
| Compression | G.711a/G.711u(32kbps)/PCM(128kbps) |
|-------------|------------------------------------|

### 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,802.1x |
| 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          | IE10/Google/Firefox/Safari...  |
| Management Software | Smart PSS, DSS   |
| Smart Phone         | iPhone, iPad, Android, Windows Phone   |

### Certifications

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

### Interface

|                 |     |
|-----------------|-----|
| Video Interface | N/A |
| Audio Interface | 1/1 |
| RS485           | N/A |
| Alarm           | 2/1 |

### Electrical

|                   |                                 |
|-------------------|---------------------------------|
| Power Supply      | AC24V/1.5A(±10%), PoE+(802.3at) |
| Power Consumption | 12W,22W (Heater on)             |

**Environmental**

|                      |  |
|----------------------|--|
| Operating Conditions | -40°C ~ 60°C (-40°F ~ +140°F) / Less than 90% RH |
| Ingress Protection   | IP66   |
| Vandal Resistance    | IK10   |

**Construction**

|              |                  |
|--------------|------------------|
| Casing       | Metal            |
| Dimensions   | Φ186(mm)×234(mm) |
| Net Weight   | 2.3kg(5.07lb)    |
| Gross Weight | 4.3kg(9.48lb)    |

**Ordering Information**

| Type           | Part Number | Description                                |
|----------------|-------------|--|
| 2MP PTZ Camera | 40212TN     | 2MP 12x PTZ Network Camera, WDR, NTSC      |
|                | 40212TNI    | 2MP 12x PTZ Network Camera, WDR, NTSC, IVS |
| Accessories    | PFB300S     | Wall Mount                                 |
|                | PFA110      | Mount Adapter                              |
|                | AC24V/1.5A  | Power Supply                               |
|                | PFA140      | Power box                                  |
|                | PFB300C     | Ceiling Mount                              |
|                | PFA120      | Junction Box                               |
|                | PFA150      | Pole Mount                                 |
|                | PFA151      | Corner Mount                               |
|                | PFB303S     | Parapet mount                              |

**Accessories**
**Included:**


PFB300S  
Wall Mount



PFA110  
Mount Adapter



AC24V/1.5A  
Power Supply

**Optional:**


PFA140  
Power box



PFB300C  
Ceiling Mount



PFA120  
Junction Box



PFA150  
Pole Mount



PFA151  
Corner Mount



PFB303S  
Parapet Mount

| Ceiling Mount             | Junction Mount            |
|---------------------------|---------------------------|
| PFA110 + PFB300C          | PFA110 + PFB300S + PFA120 |
|                           |                           |
| Power Box Mount           | Pole Mount                |
| PFA110 + PFB300S + PFA140 | PFA110 + PFB300S + PFA150 |
|                           |                           |
| Corner Mount              | Parapet Mount             |
| PFA110 + PFB300S + PFA151 | PFA110 + PFB303S          |
|                           |                           |

Dimensions (mm)

