

# DH-SD29204T-GN

2MP 4x IR PTZ Network Camera



- 1/2.7" 2Megapixel CMOS
- Powerful 4x optical zoom
- Support Triple-streams encoding
- WDR, Day/Night(ICR), Ultra DNR
- Max. 25/30fps@1080P
- IVS
- Support PoE
- IR distance up to 30m



## System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, the camera provides a wide monitoring range and great detail. The camera delivers 2MP resolution at 25/30fps. The camera is equipped with smooth control, high quality image, and good protection, meeting compact size demands of video surveillance applications.

## Functions

### Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. 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.

### 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.

### Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -30 °C to +60 °C (-22 °F to +140 °F) with 90% humidity.

### Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) 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  |
| Electronic Shutter Speed | 1/1s~1/30,000s   |
| Minimum Illumination     | Color: 0.05Lux@F1.6; B/W: 0.005Lux@F1.6; 0Lux@F1.6 (IR on) |
| S/N Ratio                | More than 50dB   |
| IR Distance              | Distance up to 30m (98ft)                                  |
| IR On/Off Control        | Auto/Manual  |
| IR LEDs                  | 4  |

### Lens

|                      |                 |
|----------------------|-----------------|
| Focal Length         | 2.7mm~11mm      |
| Max. Aperture        | F1.6            |
| Angle of View        | H: 112.5° ~ 30° |
| Optical Zoom         | 4x              |
| Focus Control        | Auto/Manual     |
| Close Focus Distance | 100mm~ 1000mm   |

### DORI Distance

\*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

| Detect      | Observe    | Recognize | Identify  |
|-------------|------------|-----------|-----------|
| 120m(394ft) | 48m(157ft) | 24m(79ft) | 12m(39ft) |

### PTZ

|                      |   |
|----------------------|---|
| Pan/Tilt Range       | Pan: 0° ~ 360° limited; Tilt: 0° ~ 90°  |
| Manual Control Speed | Pan: 0.1° ~ 100° /s; Tilt: 0.1° ~ 60° /s  |
| Preset Speed         | Pan: 100° /s; Tilt: 60° /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

|               |  |
|---------------|--|
| Event Trigger | Motion detection, Video tampering, Network disconnection, IP address conflict, Illegal access, Storage anomaly |
| Auto Tracking | N/A  |
| IVS           | Tripwire, Intrusion, Abandoned/Missing   |

### Advanced Intelligent Functions

### Face Detection

### Video

|                                      |   |
|--------------------------------------|---|
| Compression                          | H.264+/H.264/MJPEG  |
| Streaming Capability                 | 3 Streams   |
| Resolution                           | 1080P(1920×1080)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)  |
| Frame Rate                           | Main stream: 1080P/720P/D1 (1 ~ 25/30fps)<br>Sub stream1: D1/CIF(1 ~ 25/30fps)<br>Sub stream2: 720P/D1/CIF (1 ~ 25/30fps) |
| Bit Rate Control                     | CBR/VBR   |
| 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 Detection                     | 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 (10XBase-T/100Base-TX)   |
| Wifi                | N/A  |
| 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 Profile S&G, API   |
| Streaming Method    | Unicast / Multicast  |
| Max. User Access    | 20 users   |
| Edge Storage        | NAS (Network Attached Storage), Local PC for instant recording, Micro SD card 128GB  |
| Web Viewer          | IE, Chrome, Firefox, Safari  |
| Management Software | Smart PSS, DSS, DMSS   |
| Smart Phone         | IOS, Android   |

### 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          |
| RS485           | N/A          |
| Audio I/O       | Built-in Mic |
| Alarm I/O       | N/A          |

**Electrical**

|                   |                           |
|-------------------|---------------------------|
| Power Supply      | DC 12V/1.5A, PoE(802.3af) |
| Power Consumption | 10W,13W (IR on)           |

**Environmental**

|                      |  |
|----------------------|--|
| Operating Conditions | -30°C ~ 60°C (-22°F ~ +140°F) / Less than 90% RH |
| Ingress Protection   | N/A  |
| Vandal Resistance    | N/A  |

**Construction**

|              |                          |
|--------------|--------------------------|
| Casing       | Metal                    |
| Dimensions   | Φ132.7 (mm) x 117.9 (mm) |
| Net Weight   | 0.95kg(2.09lb)           |
| Gross Weight | 1kg(2.20lb)              |

**Ordering Information**

| Type           | Part Number     | Description                             |
|----------------|-----------------|---|
| 2MP PTZ Camera | DH-SD29204T-GN  | 2MP 4x IR PTZ Network Camera, WDR, PAL  |
|                | DH-SD29204TN-GN | 2MP 4x IR PTZ Network Camera, WDR, NTSC |
|                | SD29204T-GN     | 2MP 4x IR PTZ Network Camera, WDR, PAL  |
|                | SD29204TN-GN    | 2MP 4x IR PTZ Network Camera, WDR, NTSC |
| Accessories    | PFB302S         | Wall Mount                              |
|                | PFA103          | Mount Adapter                           |
|                | DC12V/2A        | Power Adapter                           |
|                | PFB300C         | Ceiling Mount                           |
|                | PFA150          | Pole Mount                              |
|                | PFA151          | Corner Mount                            |

**Accessories**

Optional:



PFB302S  
Wall Mount



PFA103  
Mount Adapter



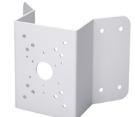
DC12V/2A  
Power Adapter



PFA150  
Pole Mount



PFB300C  
Ceiling Mount



PFA151  
Corner Mount

| Wall Mount           | Pole Mount            |
|----------------------|-----------------------|
| PFA103+PFB302S       | PFA103+PFB302S+PFA150 |
|                      |                       |
| <b>Ceiling Mount</b> |                       |
| PFA103+PFB300C       |                       |
|                      |                       |

**Dimensions (mm)**

