# DH-SD29204UE-GN-W

## 2MP 4x Starlight IR PTZ Wi-Fi Network Camera

· 1/2.8" STARVIS™ CMOS
· Powerful 4x optical zoom
· Support Starlight
· WDR, Day/Night(ICR), Ultra DNR
· Max. 25/30fps@1080P
· IVS
· Support Wi-Fi
· IR distance up to 30m

WDR    ICR D/N    WiFi    0.005Lux

## 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.

### High Efficiency Video Coding (H.265)
The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

### Starlight Technology
For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

### 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.

ONVIF

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.8" STARVIS™ 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: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6; 0Lux@F1.6 (IR on) |
| 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(up to 32 preset per tour), 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

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|---|---|
| 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

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|---|---|
| Compression | H.265/H.264/MJPEG(Sub Stream) |
| 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) |
| | Sub stream1: D1/CIF(1 ~ 25/30fps) |
| | Sub stream2: 720P/D1/CIF (1 ~ 25/30fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.265/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

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|---|---|
| Compression | G.711a/G.711mu/PCM/G.726/AAC/G722.1/G.729/ MPEG2-Layer2 |

### Network

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|---|---|
| Ethernet | RJ-45 (10XBase-T/100Base-TX) |
| Wifi | Support |
| 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 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1 |

**Interface**

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

**Electrical**

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|---|---|
| Power Supply | DC 12V/1.5A |
| 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-SD29204UE-GN-W | 2MP 4x Starlight IR PTZ Wi-Fi Network Camera, WDR, PAL |
| | DH-SD29204UEN-GN-W | 2MP 4x Starlight IR PTZ Wi-Fi Network Camera, WDR, NTSC |
| | SD29204UE-GN-W | 2MP 4x Starlight IR PTZ Wi-Fi Network Camera, WDR, PAL |
| | SD29204UEN-GN-W | 2MP 4x Starlight IR PTZ Wi-Fi 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 |
| Ceiling Mount | |
| PFA103+PFB300C | |



## Dimensions (mm)



⌀132.7mm
⌀34.0mm
⌀116.8mm
⌀117.9mm
⌀75.4mm