

# DH-SD29204UE-GN

2MP 4x Starlight IR PTZ Network Camera



- 1/2.8" STARVIS™ 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.

### 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.



**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	2

**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**

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.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**

Compression	G.711a/G.711mu/PCM/G.726/AAC/G722.1/G.729/MPG2-Layer2
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**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 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2.No.60950-1
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**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	Ø132.7 (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	2MP 4x Starlight IR PTZ Network Camera, WDR, PAL
	DH-SD29204UEN-GN	2MP 4x Starlight IR PTZ Network Camera, WDR, NTSC
	SD29204UE-GN	2MP 4x Starlight IR PTZ Network Camera, WDR, PAL
	SD29204UEN-GN	2MP 4x Starlight 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
Ceiling Mount	
PFA103+PFB300C	

**Dimensions (mm)**

