

# DH-PTZ1C203UE-GN-W

## 2MP 3X Starlight IR PTZ Wi-Fi Network Camera



### 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 1080P 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

#### 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 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating makes it suitable for demanding outdoor applications.

#### Protection

The camera allows for 4KV lightning rating, which provides effective protection for both the camera and its structure against lightning.

#### Interoperability

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

#### 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.

- 1/2.8" 2Megapixel STARVIS™ CMOS
- Powerful 3x optical zoom
- Starlight technology
- Max. 25/30fps@1080P
- IVS
- WDR
- H.265 Encoding
- Support Wi-Fi
- IR distance up to 20m
- IP66



#### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

### Technical Specification

#### Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Max. Resolution	2MP
Effective Pixels	1920 (H) × 1080 (V)
ROM	128MB
RAM	256MB
Electronic Shutter Speed	1/3–1/30000s
Minimum Illumination	Color: 0.005Lux@F1.8 B/W: 0.0005Lux@F1.8 0Lux (IR light on)
IR Distance	20 m (65.6 ft)
IR On/Off Control	Zoom Prio/Manual/SmartIR
IR LED Number	1

#### Lens

Focal Length	2.7mm–8.1mm			
Aperture	F1.8–F2.7			
Field of View	H: 46.43°–106.79° V: 25.91°–57.88°			
Optical Zoom	3x			
Focus Control	Auto/Semi-Auto/Manual			
Close Focus Distance	0.8 m–1.7 m			
Iris Control	Fixed Iris			
DORI Distance	Detect	Observe	Recognize	Identify
	101.4 m (332.68 ft)	40.6 m (133.20 ft)	20.3 m (66.60 ft)	10.1m (33.14 ft)

#### PTZ

Pan/Tilt Range	Pan: 0°–180°; Tilt: -5°–+55°
Manual Control Speed	Pan: 6°/s; Tilt: 3°/s

#### Intelligence

IVS	Tripwire; Intrusion; Object Abandoned/Missing
Advanced Intelligence	Face Detection; Heat Map

#### Video

Video Compression	H.265; H.264BaselineProfile; H.264MainProfile; H.264HighProfile; MJPEG; H.265 +; H.264+
Streaming Capability	3 Streams
Resolution	1080P (1920×1080); 1.3M (1280×960); 720P (1280×720); D1 (704×576); CIF (352×288)
Video Frame Rate	Main Stream: 1080P/1.3M/720P(1–25/30fps) Sub Stream 1: D1/CIF(1–25/30fps) Sub Stream 2: 720P/D1/CIF(1–25/30fps)

Bit Rate Control	Variable Bit Rate/Constant Bit Rate
Video Bit Rate	H.264: 216 Kbps–8192 Kbps H.265: 108 Kbps–8192 Kbps
Day/Night	ICR
BLC	Support
WDR	120dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/ Natural/Street lamp
Gain Control	Auto/Manual
Noise Reduction	2D/3D
Motion Detection	Support
Region of Interest (RoI)	Support
Electronic Image Stabilization	Support
Defog	Electronic Defog
Digital Zoom	16x

#### Audio

Audio Compression	G.711A; G.711Mu; G.726; AAC; MPEG2-Layer2; G.722.1; G.729
Audio In	1
Audio Out	1

#### Network

Ethernet Port	1 RJ-45 Port 10/100Base-T
Network Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMP; DNS; DDNS; NTP; SNMPv1/v2c/ v3(MIB-2); ARP; RTCP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE
Interoperability	ONVIF; CGI
Streaming Method	Unicast/Multicast
User/Host	20 (Total bandwidth 48M)
Edge Storage	FTP; Micro SD card (256G); P2P
Browser	IE7 and newer versions Chrome 42 and older versions Firefox 52 and older versions Safari
Management Software	Smart player Configtool SMART PSS DMSS DSS

#### Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4- 2014
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#### Electrical

Power Supply	DC12V/1.5A±10%
Power Consumption	7W 11W (PTZ, IR light)

**Environmental**

Operating Conditions	-30°C to +60°C (-22°F to 140°F)
Operating Humidity	≤95% RH
Ingress Protection	IP66; TVS 4000V lightning protection; surge protection

**Construction**

Housing Material	Aluminium alloy ADC12
Dimensions	Wall mounted: 195.3 mm×90 mm×102.7 mm (7.69"×3.54"×4.04") Ceiling mounted: 190.8 mm×90 mm×112.2 mm (7.51"×3.54"×4.12")
Weight	Net Weight: 0.9 kg (1.98 lb); Gross Weight: 1.2 kg (2.65 lb)

**Ordering Information**

Type	Model	Description
2MP PTZ Camera	DH-PTZ1C203UE-GN-W	2MP 3X Starlight IR PTZ Wi-Fi Network Camera, WDR, PAL
	DH-PTZ1C203UEN-GN-W	2MP 3X Starlight IR PTZ Wi-Fi Network Camera, WDR, NTSC
	PTZ1C203UE-GN-W	2MP 3X Starlight IR PTZ Wi-Fi Network Camera, WDR, PAL
	PTZ1C203UEN-GN-W	2MP 3X Starlight IR PTZ Wi-Fi Network Camera, WDR, NTSC
Accessories	PFA731	Junction Box (wall-mount)
	DC12V/2A	Power Adapter

**Accessories**

**Optional:**



PFA731  
Junction Box  
(wall-mount)



DC12V/2A  
Power Adapter

Ceiling Mount	Wall Mount	Wall Mount PFA731 Junction Box

**Dimensions (mm/inch)**

