

WiFi Mini PTZ Network Camera

2 MP 4x Network Camera



System Overview

Featuring a True Day/Night, 2-megapixel resolution, Pan/Tilt/Zoom (PTZ) camera with a 4x optical zoom lens, this series provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. The series combines a day/night mechanical IR cut filter for the highest image quality for variable lighting conditions during the day.

Functions

True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

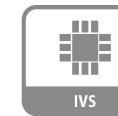
Wide Dynamic Range

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.

- 1/2.7-in. 2 MP CMOS Sensor
- Wi-Fi Support
- Triple Stream Encoding
- Smart H.264+ Video Compression
- 1080p at 30 fps Maximum Resolution
- Powerful 4x Optical Zoom
- True WDR
- Intelligent Video System
- IP66 Ingress Protection and IK10 Vandal Resistance



Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

Environmental

With a temperature range of -30°C to +60°C (-22°F to +140°F), the camera is designed for extreme temperature environments. The camera complies with the IK10 Vandal Resistance impact rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.). Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

Supporting ±25% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 8KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Technical Specification

Camera

Image Sensor	1/2.7-in. CMOS
Effective Pixels	1920 (H) x 1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	1/1 s to 1/30,000 s
Minimum Illumination	Color: 0.05 lux at F1.6 B/W: 0.005 lux at F1.6
S/N Ratio	More than 50 dB

Lens

Focal Length	2.7 mm to 11.0 mm (4x Optical Zoom)
Max Aperture	F1.6
Angle of View	H: 112.5° to 30°
Focus Control	Auto / Manual
Close Focus Distance	100 mm to 1000 mm

DORI¹ Distance

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

PTZ

Pan/Tilt Range	Pan: 0° to 355° endless Tilt: 0° to 90°
Manual Control Speed	Pan: 0.1° to 100° /s Tilt: 0.1° to 60° /s
Preset Speed	Pan: 100° /s Tilt: 60° /s
Presets	300 (DH-SD)
PTZ Mode	8 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
Time Task	Auto activation of Preset/ Pan/ Scan/ Tour/ Pattern by preset-time
Protocol	DH-SD

Intelligence

IVS	Tripwire, Intrusion, Abandoned Object Detection, Missing Object Detection,
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Video

Compression	Smart H.264+ / H.264 / MJPEG
Streaming Capability	3 Streams
Resolution	1080p (1920 × 1080), 720p (1280 × 720), D1 (704 × 480), CIF (352 × 240)
	Main Stream: 1080p, 720p, or D1 at 30 fps
	Sub Stream1: D1/CIF at 30 fps
	Sub Stream2: 720p/D1/CIF at 30 fps
Bit Rate Control	CBR, VBR
Bit Rate	Smart H.264+/H.264: 448 K to 8192 Kbps, MJPEG: 5120 K to 10240 Kbps
Day/Night	Auto (ICR), Color, B/W
BLC Mode	BLC, HLC, WDR (120 dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto, Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detection	Off, On (4 Zone, Rectangle)
Region of Interest	Off, On (4 Zone)
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Network

Ethernet	RJ-45 (10 Base-T/100 Base-TX)
Wi-Fi	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, PSIA, CGI
Streaming method	Unicast / Multicast
Max. User Access	20
Edge Storage	NAS (Network Attached Storage), Local PC for instant recording, Micro SD Card, maximum 128GB
Web Viewer	IE10, Firefox, Safari
Management Software	Smart PSS, DSS
Mobile Operating System	Android, IOS

Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 Subpart B, ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2, No.60950-1
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Electrical

Power Supply	12 VDC, 1.5 A
Power Consumption	10 W

Environmental

Operating Conditions	-30°C to +60°C (-22°F to +140°F), Less than 90% RH
Storage Conditions	-30°C to +60°C (-22°F to +140°F), Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	ø122.8 mm x 89.0 mm (ø4.80 in. x 3.50 in.)
Net Weight	0.66 kg (1.46 lbs)
Gross Weight	0.71 kg (1.57 lbs)

Accessories

Optional:



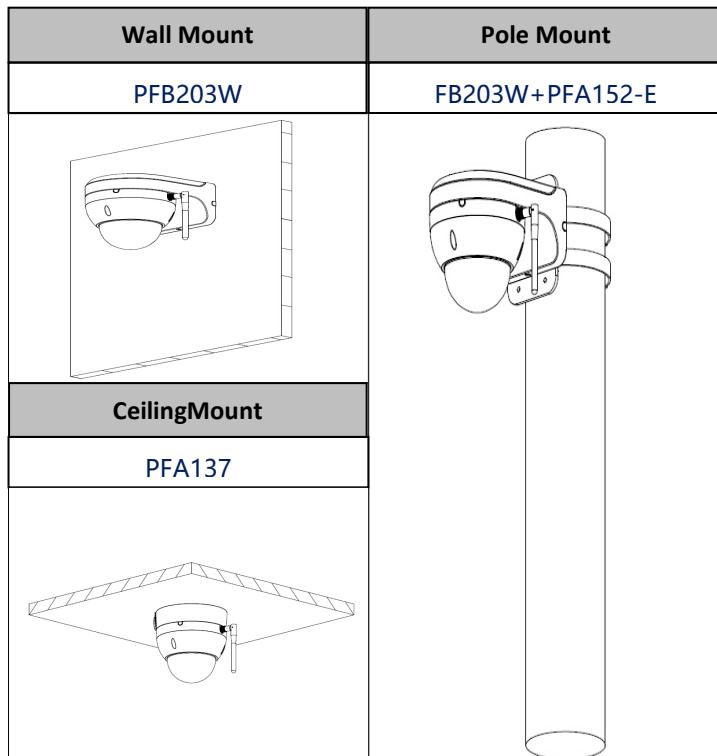
PFB203W
Wall Mount



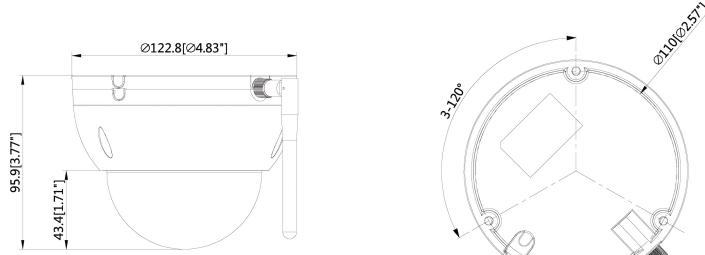
PFA137
Junction Box



PFA152-E
Pole Mount



Dimensions (mm/inch)



Ordering Information

Type	Part Number	Description
2 MP Camera	DH-SD22A204TN-GN-W	2 MP HD PTZ 4x Zoom, WDR, IVS
Accessories, optional	DC12V/2A	Power Adapter
	PFB203W	Wall Mount Bracket
	PFA137	Junction Box
	PFA152-E	Pole Mount Bracket