

2 MP Mini PTZ Network Camera

2 MP 12x Starlight Mini PTZ Network Camera



- 1/2.8-in. 2MP STARVIS™ CMOS Sensor
- Starlight Technology for Ultra-low Light Sensitivity
- Powerful 12x Optical Zoom
- Triple-stream Encoding
- H.265 and H.264 Dual Codec
- 1080p at 30 fps Maximum Resolution
- Intelligent Video System (IVS) Analytics
- IP66 Ingress Protection and IK10 Vandal Resistance
- PoE+ Support
- Five-year Warranty*



System Overview

The 2 MP Starlight Mini PTZ Dome camera features a 1/2.8-in. STARVIS™ CMOS imager with a 12x optical zoom lens, and provides an all in one solution for capturing long-distance video surveillance for indoor and outdoor applications. The camera uses the H.265 video compression standard to improve encoding efficiency, preserving high-quality video. The PTZ camera is equipped with quick and accurate pan/tilt/zoom control and True WDR for applications with direct sunlight or glare.

Functions

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers light sensitivity that captures 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.

Intelligent Video System

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 real time. In addition to scene analytics, the camera offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

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 automatically to provide usable video.

High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression rate at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies such as H.264. H.265 achieves impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional encoding step called sample-adaptive offset.

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 an IK10 vandal resistance 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 and subjected to rigorous dust and water immersion tests, the IP66 rating makes it suitable for demanding outdoor applications.

Cybersecurity

Dahua network cameras are equipped with a series of key cybersecurity technologies including: security authentication and authorization, access control, trusted protocol, encrypted transmission, and encrypted storage. These technologies improve the camera's ability to prevent malicious access and to protect data.

Protection

This camera suits even the harsh conditions for outdoor applications. Its 2KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Technical Specification

Camera

Image Sensor	1/2.8-in. STARVIS™ CMOS Sensor
Effective Pixels	1920(H) x 1080(V), 2MP
RAM/ROM	1024 MB / 128 MB
Scanning System	Progressive
Electronic Shutter Speed	1/1 s to 1/30,000 s
Minimum Illumination	Color: 0.005 lux at F1.6 B/W: 0.0005 lux at F1.6
S/N Ratio	More than 50 dB

Lens

Focal Length	5.3 mm to 64 mm
Max. Aperture	F1.6 to F4.4
Angle of View	Horizontal: 58.2° to 4.8°
Optical Zoom	12x
Focus Control	Auto, Manual
Close Focus Distance	100 mm to 1000 mm

DORI Distance¹

Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
883 m (2897 ft)	353 m (1158 ft)	177 m (581 ft)	88 m (289 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -2° to 90° Auto Flip 180°
Manual Control Speed	Pan: 0.1° to 300° /s Tilt: 0.1° to 120° /s
Preset Speed	Pan: 300° /s Tilt: 200° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan
Speed Compensation	Proportional Pan/Tilt Speed to Zoom Ratio
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-SID

Video

Compression	H.265, H.264
Streaming Capability	Three (3) Streams
Resolution	1080p (1920 x 1080), 1.3 MP (1280 x 960), 720p (1280 x 720), D1 (704 x 480), CIF (352 x 240)

	Main Stream	1080p, 720p, or D1 at 30 fps
Frame Rate	Sub Stream 1	D1 or CIF at 30 fps
	Sub Stream 2	1080p, 720p, D1, or CIF at 30 fps
Bit Rate Control	CBR, VBR	
Bit Rate	H.265/H.264: 448 K to 8192 Kbps MJPEG: 5120 K to 10240 Kbps	
Day/Night	Auto (ICR), Color, B/W	
Backlight Compensation	BLC, HLC, True WDR (120 dB)	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto, Manual	
Noise Reduction	Ultra DNR (2D/3D)	
Advanced Features	Motion Detection, Region of Interest, Defog	
Digital Zoom	16x	
Flip	180°	
Privacy Masking	Up to 24 areas	
Audio		
Compression	G.711a, G.711u (32 kbps), PCM (128 kbps)	
Network		
Ethernet	RJ-45 (10 Base-T/100 Base-TX)	
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 Users	
Edge Storage	Network Attached Storage (NAS) Local PC for Instant Recording Micro SD Card Slot, maximum 128 GB	
Web Viewer	IE 10, Firefox, Safari	
Management Software	Smart PSS, DSS	
Mobile Operating System	IOS, Android	
Cybersecurity	Video Encryption, Firmware Encryption, Configuration Encryption, Digest, WSSE, Account Lockout, Security Logs, IP/MAC Filtering, Generating and Importing X.509 Certification, Syslog, HTTPS, 802.1x, Trusted Boot, Trusted Execution, Trusted Upgrade	
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CE	EN 55032 EN 55024 EN 50130-4	
UL	UL60950-1 + CAN/CSA C22.2, No.60950-1	
Electromagnetic Compatibility (EMC)	CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014	
Interface		
Audio	Input: One (1) Channel Output: One (1) Channel	
Alarm	Input: Two (2) Channels Output: One (1) Channel	

1. The DORI distance is a measure of the general proximity of the right camera for your needs. The DORI distance is calculated according to EN 62676-4, the standard that defines the criteria for the Detect, Observe, Recognize and Identify results.

Electrical

Power Supply Refer to the product label for power information
 Power Consumption

Environmental

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

Cons

Casing Metal
 Dimensions \varnothing 170.0 mm x 155.0 mm (\varnothing 6.69 in. x 6.10 in.)
 Net Weight 1.80 kg (3.97 lb)
 Gross Weight 3.30 kg (7.28 lb)

Intelligence

IVS triggers an alarm and takes a defined action for the following events:

Standard Features

- Tampering with the camera.
- Error writing to an onboard Micro SD card.
- Error sending or receiving data over the network.
- Unauthorized access to the camera.

Premium Features

- Motion** An object moves through any part of the scene.
- Tripwire** A target crosses a user-defined line.
- Intrusion** A target enters or exits a defined perimeter.
- Scene Change** A person or object moves the camera to change the scene or covers the camera to obscure the scene.
- Abandoned/Missing Object** A target leaves an object in designated area, or a target removes an object from the same designated area.

Ordering Information

Type	Part Number	Description
2 MP PTZ Camera	42212TNI	2 MP 12x Starlight Mini PTZ Network Camera, True WDR, IVS
Accessory, included	DC24V/2.5A	Power Adapter
	PFA102	Mount Adapter
	PFA150	Pole Mount
Accessories, optional	PFA151	Corner Mount
	PFB300C	Ceiling Mount
	PFB302S	Wall Mount

Accessories

Included:



DC24V/2.5A Power Adapter

Optional:



PFA102 Mount Adapter



PFA151 Corner Mount



PFA150 Pole Mount



PFB300C Ceiling Mount



PFB302S Wall Mount

Ceiling Mount	Wall Mount
PFA102 + PFB300C	PFA102 + PFB302S
Pole Mount	Corner Mount
PFA102 + PFB302S + PFA150	PFA102 + PFB302S + PFA151

Dimensions (mm/in.)

