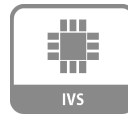


# 4x Mini PTZ Dome

## 2 MP Indoor/Outdoor Network Camera



- 1.27-in. 2 MP CMOS Sensor
- Max 60 fps at 720p and 30fps at 1080p
- Powerful 4x Optical Zoom
- True WDR
- Intelligent Video System
- Outdoor Rated IP66
- Vandal Resistant IK10
- POE
- Five-year Warranty (for products sold through authorized Dahua Dealers)



### 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

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) 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.

#### Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, and Facial Detection, for searching or identification of individuals.

#### 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. The camera complies with the IK10 Vandal Resistance impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. 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" CMOS
Effective Pixels	1920 H x 1800 V, 2 MP
Scanning System	Progressive
Electronic Shutter Speed	1/1 ~ 1/30,000s
Minimum Illumination	Color: 0.05Lux@F1.6; B/W: 0.005Lux@F1.6
S/N Ratio	More than 50dB

### Lens

Focal Length	2.7mm ~ 11mm (4x Optical zoom)
Max Aperture	F1.6
Angle of View	H: 112.5° ~ 30°
Focus Control	Auto / Manual
Close Focus Distance	100mm ~ 1000mm

### DORI 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° ~ 355° endless; 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 (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

### Video

Compression	Smart H.264+ / H.264 / MJPEG
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 at 30 fps Sub Stream 1: D1/CIF at 30 fps Sub Stream 2: 720p/D1/CIF at 30 fps
Bit Rate Control	CBR / VBR
Bit Rate	Smart H.264+/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)
Advanced Features	Motion Detection, Region of Interest, Defog
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

### Network

Ethernet	RJ-45 (10Base-T/100Base-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
Edge Storage	NAS (Network Attached Storage), Local PC for instant recording, Micro SD card 128GB
Web Viewer	IE 10, Firefox, Safari
Management Software	Smart PSS, DSS
Mobile Operating System	Android, IOS

## Certifications

<b>Certifications</b>	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

<b>Power Supply</b>	DC12V, 1.5 A; PoE (802af)
<b>Power Consumption</b>	10W

## Environmental

<b>Operating Conditions</b>	-30°C ~ +60°C (-22°F ~ +140°F) Less than 95% RH
<b>Ingress Protection</b>	IP66
<b>Vandal Resistance</b>	IK10

## Construction

<b>Casing</b>	Metal
<b>Dimensions</b>	Φ122 mm x 89 mm (Φ4.80" x 3.50")
<b>Net Weight</b>	0.66 kg (1.46 lbs)
<b>Gross Weight</b>	0.71 kg (1.57 lbs)

## Intelligence

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

<b>Standard Features</b>	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.
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## Premium Features

<b>Motion</b>	An object moves through any part of the scene.
<b>Tripwire</b>	A target crosses a user-defined line.
<b>Intrusion</b>	A target enters or exits a defined perimeter.
<b>Abandoned/Missing Object</b>	A target leaves an object in designated area, or a target removes an object from the same designated area.

## Advanced Features

<b>Facial Detection</b>	Detects and captures a snapshot of a human face in a defined area within a scene.
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## Accessories

Optional:



PFB203W  
Wall Mount

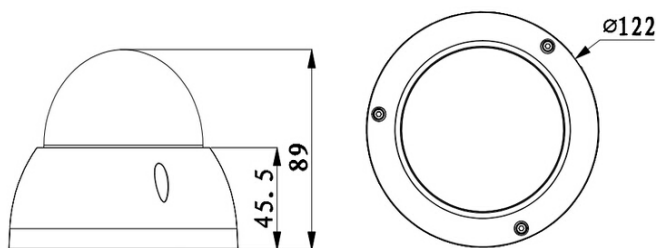
PFB200C  
Ceiling mount

PFA137  
Junction Box

PFA152-E  
Pole mount

Wall Mount	Ceiling Mount
PFB203W	PFB200C
Junction Mount	Pole Mount
PFA137	PFB203W+PFA152-E

## Dimensions (mm/inch)



## Ordering Information

Type	Part Number	Description
2 MP Camera	DH-SD22A204TN-GNI	2MP HD PTZ 4x Zoom, WDR, PoE, IVS
Accessories, Optional	PFA137	Water-proof Junction Box
	PFA152-E	Pole Mount Bracket
	PFB200C	Ceiling Mount Bracket
	PFB203W	Wall Mount Bracket
	DC12V/1.5A	Power Adapter