

2 MP Fixed Mini Dome Network Camera

2 MP IR Mini Dome Network Camera



- 1/2.8-in. 2 MP Progressive Scan Exmor CMOS
- Triple-stream Encoding with Smart H.265+ Compression
- 1080p (1920 × 1080) at 60 fps
- Smart Detection
- True Wide Dynamic Range (120 dB) and Day/Night IR Cut Filter
- 2.8 or 3.6 mm Fixed Lens Options
- Audio and Alarm Interfaces
- Maximum IR LED Length 30 m (98 ft)
- Micro SD Memory, IP67, IK10, PoE
- Five-year Warranty



System Overview

Dahua's Pro series of cameras offers high-resolution video and cutting-edge technology in a compact and accessible package. The cameras feature H.265 video compression, reducing bandwidth and storage requirements without sacrificing video quality. The camera series incorporates Starlight Technology, Smart IR, and the Intelligent Video Analysis, features typically found on high-end surveillance systems. This series provides a rugged enclosure rated to IP67 Ingress Protection and to IK10 Vandal Resistance to protect your security investment.

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 0.009 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Wide Dynamic Range

For applications with both bright and low-light 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.

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.

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.

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.

Environmental

With a temperature range of -30 °C to +60 °C (-22 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

Protection

Supporting ±30% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Technical Specification

Camera

| | |
|----------------------|--|
| Image Sensor | 1/2.8-in. 2 MP Progressive Scan Exmor CMOS |
| Effective Pixels | 1920(H) x 1080(V) |
| RAM/ROM | 256 MB / 32 MB |
| Scanning System | Progressive |
| Minimum Illumination | Color: 0.009 lux at F2.0 0 lux at F2.0 with IR on |
| S/N Ratio | More than 50 dB |
| IR Distance | Distance up to 30.0 m (98.40 ft) |
| IR On/Off Control | Auto/ Manual |
| IR LEDs | 24 |

Lens

| | | |
|---------------|------------|------------------------------------|
| Lens Type | | Fixed |
| Mount Type | | Board-in |
| Focal Length | | N24BL52: 2.8 mm N24BL53: 3.6 mm |
| Max. Aperture | | F2.0 |
| Angle of View | Horizontal | N24BL52: 110° N24BL53: 87° |
| | Vertical | N24BL52: 58° N24BL53: 48° |
| Focus Control | | Fixed |

Pan/Tilt/Rotation

| | |
|-------|--|
| Range | Pan: 0° to 360° Tilt: 0° to 64° Rotation: 0° to 360° |
|-------|--|

Video

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|----------------------|---|
| Compression | Smart H.265+, H.265, Smart H.264+, H.264, MJPEG |
| Streaming Capability | Three (3) Streams |
| Resolution | 1080p (1920 x 1080) 1.3 MP (1280 x 960) 720p (1280 x 720) D1 (704 x 480) VGA (640 x 480) CIF (352 x 240) |
| Frame Rate | Main Stream: 1080p or 720p at 60 fps |
| | Sub Stream 1: D1 at 60 fps |
| | Sub Stream 2: 1080p at 30 fps |
| Bit Rate Control | CBR, VBR |
| Bit Rate | H.265: 14 to 5632 Kbps H.264: 24 to 9472 Kbps |
| Day/Night | Auto (ICR), Color, B/W |
| BLC Mode | BLC, HLC, True WDR (120 dB) |

| | |
|--------------------|---|
| White Balance | Auto, Natural, Street Lamp, Outdoor, Manual |
| Gain Control | Auto, Manual |
| Noise Reduction | 3D DNR |
| Motion Detection | Off, On (4 Zone, Rectangle) |
| Region of Interest | Off, On (4 Zone) |
| Smart IR | Support |
| Digital Zoom | 16x |
| Flip | 0°, 90°, 180°, 270° |
| Mirror | Off, On |
| Privacy Masking | Off, On (4 Area, Rectangle) |

Audio

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|-------------|-----------------------------|
| Compression | G.711a, G.711Mu, AAC, G.726 |
|-------------|-----------------------------|

Network

| | |
|-------------------------|---|
| Ethernet | RJ-45 (10/100 Base-T) |
| Protocol | HTTP, HTTPS, TCP, ARP, RTSP, RTP, UDP, SMTP, FTP, DHCP, DNS, DDNS, PPPOE, IPv4/v6, QoS, UPnP, NTP, Bonjour, 802.1x, Multicast, ICMP, IGMP, SNMP |
| Interoperability | ONVIF, PSIA, CGI |
| Streaming Method | Unicast, Multicast |
| Max. User Access | 10 Users / 20 Users |
| Edge Storage | NAS Local PC for Instant Recording MicroSD Card, maximum 128 GB |
| Web Viewer | IE, Firefox, Safari |
| Management Software | Smart PSS, DSS |
| Mobile Operating System | IOS, Android |

Certifications

| | |
|-------------------------------|-----------------------|
| Safety | UL60950-1 |
| Electromagnetic Compatibility | FCC Part 15 Subpart B |

Interface

| | |
|-----------------|---|
| Audio Interface | Input: One (1) Channel Output: One (1) Channel |
| Alarm | Input: One (1) Channel Output: One (1) Channel |

Electrical

| | |
|-------------------|--------------------------------|
| Power Supply | 12 VDC, PoE (802.3af, Class 0) |
| Power Consumption | < 5 W |

Environmental

| | |
|----------------------|---|
| Operating Conditions | -30° C to +60° C (-22° F to +140° F), Less than 95% RH |
| Storage Conditions | -30° C to +60° C (-22° F to +140° F), Less than 95% RH |
| Ingress Protection | IP67 |
| Vandal Resistance | IK10 |

Construction

| | |
|--------------|---|
| Casing | Metal |
| Dimensions | ø109.90 mm x 81.0 mm (ø4.33 in. x 3.19 in.) |
| Net Weight | 0.41 kg (0.91 lb) |
| Gross Weight | 0.53 kg (1.17 lb) |

Intelligence

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

| | |
|--------------------------|---|
| Standard Features | <ul style="list-style-type: none"> • 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. |
| Advanced Features | |
| Facial Detection | Detects and captures a snapshot of human face in a defined area within a scene. |

Ordering Information

| Type | Part Number | Description |
|------------------------|-------------|--|
| 2 MP camera | N24BL52 | 2 MP IR Mini Dome Network Camera, 2.8 mm, WDR, IVS |
| | N24BL53 | 2 MP IR Mini Dome Network Camera, 3.6 mm, WDR, IVS |
| Accessories (optional) | PFB203W | Wall mount |
| | PFA136 | Junction box |
| | PFA152 | Pole mount |

Accessories

Optional:



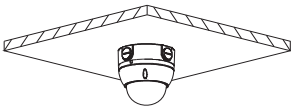
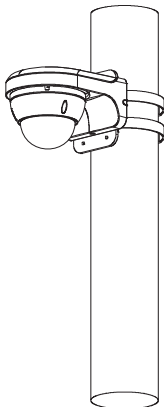
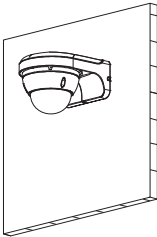
PFA136
Junction Box



PFB203W
Wall Mount



PFA152
Pole Mount

| Junction Mount | Pole Mount |
|--|--|
| PFA136 | PFB203W + PFA152 |
|  |  |
| Wall Mount | |
| PFB203W | |
|  | |

Dimensions (mm/inch)

