**Lite Series | DH-IPC-HDW2831T-ZS-S2**

**DH-IPC-HDW2831T-ZS-S2**

8MP Lite IR Vari-focal Eyeball Nework Camera

- 8MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 8MP (3840 × 2160) @15 fps, and supports 2688x1520 (2688 × 1520) @25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max IR distance: 40 m
- ROI, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Supports max. 256 GB Micro SD card
- 12V DC/POE power support
- IP67 protection

**System Overview**

With upgraded H.265 encoding technology, Dahua Lite series network camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better color image in the condition of low illumination. It supports SD card storage, dust-proof function, waterproof function and vandal-proof function, complying to the standards of IP67 and IK10 (Supported by some select models).

**Functions**

**Smart Codec**

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

**WDR**

With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

**Starlight**

Dahua Starlight technology mainly applies to the environment of low illuminance, and it can provide clear colorful video. Even in the environment of ultra-low illuminance, the technology can guarantee the good image effect.

**IVS**

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

**Protection (IP67, wide voltage)**

**iP67**: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

**Wide voltage**: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.
**Technical Specification**

**Camera**
- Image Sensor: 1/2.7” 8Megapixel progressive CMOS
- Effective Pixels: 3840 (H) × 2160 (V)
- ROM: 128 MB
- RAM: 256 MB
- Scanning System: Progressive
- Electronic Shutter Speed: Auto/Manual 1/3 s–1/100,000 s
- Min. Illumination: 0.008 Lux@F1.5
- IR Distance: 40 m (131.23 ft)
- IR On/Off Control: Auto/Manual
- IR LEDs Number: 2
- Pan/Tilt/Rotation Range: Pan: 0°–360°, Tilt: 0°–78°, Rotation: 0°–360°

**Lens**
- Lens Type: Motorized vari-focal
- Mount Type: φ14
- Focal Length: 2.7 mm–13.5 mm
- Max. Aperture: F1.5
- Iris Type: Fixed
- Close Focus Distance: 0.8 m–0.8 m (2.62 ft–2.62 ft)
- DORI Distance:
<table>
<thead>
<tr>
<th>Lens</th>
<th>W</th>
<th>T</th>
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<tbody>
<tr>
<td>Detec</td>
<td>85.3 m (279.9 ft)</td>
<td>280 m (918.6 ft)</td>
</tr>
<tr>
<td>Observe</td>
<td>34.1 m (111.9 ft)</td>
<td>112 m (367.5 ft)</td>
</tr>
<tr>
<td>Recognize</td>
<td>17 m (55.8 ft)</td>
<td>56 m (181.7 ft)</td>
</tr>
<tr>
<td>Identify</td>
<td>8.5 m (27.9 ft)</td>
<td>28 m (91.9 ft)</td>
</tr>
</tbody>
</table>
- Smart Focus Distance: 0°–360°
- Smart IR: Yes
- Image Rotation: 0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution and lower.)
- Mirror: Yes
- Privacy Masking: 4 areas

**Video**
- Video Compression: H.265; H.264; MJPEG
- Smart Codec: Yes
- Video Frame Rate:
  - Main stream: 3840 × 2160 (1 fps–15 fps); 2688 × 1520 (1 fps–25/30 fps)
  - Sub-stream: 704 × 576 (1 fps–25 fps); 704 × 480 (1 fps–30 fps)
- Stream Capability: 2 streams
- Resolution:
  | 3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048); 3072 × 1728 (3072 × 1728); 2592 × 1944 (2592 × 1944); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
- Bit Rate Control: CBR/VBR
- Video Bit Rate: H.264: 32 Kbps–8192 Kbps; H.265: 12 Kbps–8192 Kbps
- Day/Night: Auto(ICR)/Color/B/W
- BLC: Yes
- HLC: Yes
- Smart IR: Yes
- Gain Control: Auto/Manual
- Noise Reduction: 3D DNR
- Motion Detection: OFF/ON (4 areas, rectangular)
- Region of Interest(RoI): Yes (4 areas)
- Smart Event:
  - General IVS Analytics: Tripwire, intrusion
- Network:
  - RJ-45 (10/100 Base-T)
  - IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; MULTICAST; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour
  - Interoperability: ONVIF(Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
  - User/Host: 20
- Edge Storage: Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
- Browser:
  - IE
  - Chrome
  - Firefox
- Management Software: Smart PSS; DSS; DMSS
- Mobile Phone: iOS; Android
- Certification:
- Certifications:
  - CE-LVD: EN60950-1
  - CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
  - UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

**Power**
- Power Supply: 12V DC/PoE (802.3af)
- Power Consumption: < 7.6W

**Environment**
- Operating Conditions: –30°C to +60°C (~–22°F to +140°F)/less than s 95% RH
- Storage Temperature: –40°C to +60°C (~–40°F to +140°F)
- Protection: IP67

www.dahuasecurity.com
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Structure

<table>
<thead>
<tr>
<th>Structure</th>
<th>Casing</th>
<th>Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>108.3 mm × Φ122 mm (4.26&quot; × Φ4.80&quot;)</td>
<td></td>
</tr>
<tr>
<td>Net Weight</td>
<td>0.69 kg (1.52 lb)</td>
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<tr>
<td>Gross Weight</td>
<td>0.88 kg (1.94 lb)</td>
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</table>

Ordering Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BMP Camera</td>
<td>DH-IPC-HDW2831TP-ZS-S2</td>
<td>BMP Lite IR Vari-focal Eyeball Network Camera, PAL</td>
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<tr>
<td></td>
<td>DH-IPC-HDW2831TN-ZS-S2</td>
<td>BMP Lite IR Vari-focal Eyeball Network Camera, NTSC</td>
</tr>
<tr>
<td>Accessories (optional)</td>
<td>PFA130-E</td>
<td>Junction Box</td>
</tr>
<tr>
<td></td>
<td>PFB203W</td>
<td>Wall Mount</td>
</tr>
<tr>
<td></td>
<td>PFA106</td>
<td>Mount Adapter</td>
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<tr>
<td></td>
<td>PFB220C</td>
<td>Ceiling Mount</td>
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<tr>
<td></td>
<td>PFA152-E</td>
<td>Pole Mount</td>
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<td></td>
<td>PFM321D</td>
<td>DC12V1A Power Adapter</td>
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<tr>
<td></td>
<td>LR1002-1ET/1EC</td>
<td>Single-port Long Reach Ethernet over Coax Extender</td>
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<tr>
<td></td>
<td>PFM900-E</td>
<td>Integrated Mount Tester</td>
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<tr>
<td></td>
<td>PFM114</td>
<td>TLC SD Card</td>
</tr>
</tbody>
</table>

Accessories

Optional:

- PFA130-E Junction Box
- PFB203W Wall Mount
- PFA106 Mount Adapter
- PFB220C Ceiling Mount
- PFA152-E Pole Mount
- PFM321D DC12V1A Power Adapter
- LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender
- PFM900-E Integrated Mount Tester
- PFM114 TLC SD Card

Dimensions (mm[inch])

- Ø122.0 [Ø4.80]
- 3–4.5 [0.18]
- 84.0 [3.31]