

# DH-IPC-HDBW5231E-Z

2MP WDR IR Dome Network Camera



- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs 2MP (1920 × 1080)@25/30 fps
- H.265 codec, high compression rate, ultra-low bitrate
- 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 disconnected, IP conflict, illegal access, voltage detection
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 GB MicroSD card
- 12V DC/PoE power support
- IP67, IK10 protectiongrade















# **SystemOverview**

With updraded H.265 encoding technology, Dahua Lite series camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better colorful image in the environment of low illumination. It supports SD card storage, waterproof function, dust-proof function and tamper-proof function, complying to the standards of IP67 and IK10.

## **Functions**

#### Smart (H.265+ & H.264+)

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart encoding technology realizes the higher efficiency than (H.265 & H.264), providing high-quality video, and reducing the cost of storage and transmission.

### Wide dynamic range (WDR)

Dahua adopts advanced Wide Dynamic Range (WDR) technology. You can get clear details in the environment of strong brightness contrast. In high brightness and back-light environment, bright region and dark region with strong light source, you can also get clear images.

#### Starlight

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

# Intelligent Video Analysis (IVS)

With advanced video algorithm, Dahua camera supports intelligent detection, such as tripwire and intrusion and so on.

#### Protection (IP67, IK10, 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.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 m (Impact energy is 20J). Wide voltage: The camera allows  $\pm 30\%$  input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.



| Technical Specification  |      |   |                      |                      |                      |  | Video Bit Rate  | H.264: 32 kbps–6144 kbps   |
|--------------------------|------|---|----------------------|----------------------|----------------------|--|---|--|
| Camera                   |      |   |                      |                      |                      |  |   | H.265: 12 kbps-6144 kbps   |
| Image Sensor             |      | 1/2.8" 2Megapixel progressive CMOS  |                      |                      |                      |  | Day/Night   | Auto(ICR)/Color/B/W  |
| Effective Pixels         |      | 1920 (H) × 1080 (V)   |                      |                      |                      |  | BLC   | Yes  |
| ROM                      |      | 128 MB  |                      |                      |                      |  | HLC   | Yes  |
| RAM                      |      | 128 MB  |                      |                      |                      |  | WDR   | 120 dB   |
| Scanning System          |      | Progressive   |                      |                      |                      |  | White Balance Auto/natural/street lamp/outdoor/manual/regional custom |  |
| Electronic Shutter Speed |      | Auto/Manual 1/3 s–1/100000 s  |                      |                      |                      |  | Gain Control  | Auto/Manual  |
| Min. Illumination        |      | 0.002Lux @ F1.5   |                      |                      |                      |  | Noise Reduction   | 3D DNR   |
| IR Distance              |      | 40 m (131.23 ft)  |                      |                      |                      |  | Motion Detection  | OFF/ON (4 areas, rectangular)  |
| IR On/Off Control        |      | Auto/Manual   |                      |                      |                      |  | Region of Interest(RoI)   | Yes (4 areas)  |
| IR LEDs Number           |      | 2   |                      |                      |                      |  | Smart IR  | Yes  |
| Pan/Tilt/Rotation Range  |      | Pan: 0°–355°<br>Tilt: 0°–75°  |                      |                      |                      |  | Image Rotation  | 0°/90°/180°/270° (Supports 90°/270° with 1080p resolution and lower.)  |
| 1                        |      | Rotation: 0°–355°   |                      |                      |                      |  | Mirror  | Yes  |
| Lens                     |      |   |                      |                      |                      |  | Privacy Masking   | 4 areas  |
| Lens Type                |      | Motorized vari-focal  |                      |                      |                      |  | Audio   |  |
| Mount Type               |      | ф14   |                      |                      |                      |  | Audio Compression   | G.711a; G.711Mu; G.726; AAC  |
| Focal Length             |      | 2.7mm-13.5mm  |                      |                      |                      |  | Network   |  |
| Max. Aperture            |      | F1.5  |                      |                      |                      |  | Network   | RJ-45 (10/100 Base-T)  |
| Field of View            |      | Pan: 109°–28°<br>Tilt: 57°–16°<br>Diagonal: 131°–33°                                    |                      |                      |                      |  | Protocol  | IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP;<br>RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS;<br>UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x;<br>Bonjour |
| Iris Type                |      | Fixed aperture  |                      |                      |                      |  |   | ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone;  |
| Close Focus Distance     |      | 0.8 m-0.8 m (2.62 ft-2.62 ft)   |                      |                      |                      |  | Interoperability  | Genetec  |
|                          | Lens | Detect<br>44.1 m  | Observe<br>17.6 m    | Recognize<br>8.8 m   | Identify<br>4.4 m    |  | User/Host   | 20   |
| DORI Distance            | W    | (144.69 ft)<br>151.7 m  | (57.74 ft)<br>60.6 m | (28.87 ft)<br>30.3 m | (14.44 ft)<br>15.1 m |  | Edge Storage  | Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS   |
| Smart Event              | T    | (497.70 ft)   | (198.82 ft)          | (99.41 ft)           | (49.65 ft)           |  | Browser   | IE<br>Chrome<br>Firefox  |
| General IVS Anal         |      | Tripwire; intrusion   |                      |                      |                      |  | Management Software   | Smart PSS; DSS; DMSS   |
| Video                    |      |   |                      |                      |                      |  | Mobile Phone  | IOS; Android   |
| Video Compression        |      | H.265; H.264; H.264B; MJPEG   |                      |                      |                      |  | Certification   | 100), 11(10)   |
| Smart Codec              |      | Yes   |                      |                      |                      |  | Certifications  | CE-LVD: EN60950-1<br>CE-EMC: Electromagnetic Compatibility Directive   |
| Video Frame Rate         |      | Main stream:<br>1920 × 1080 (1 fps-25/30 fps)<br>Sub stream:<br>704 × 576 (1 fps-25fps) |                      |                      |                      |  |   | 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07  |
|                          |      | 704 × 480 (1 fps-30fps)   |                      |                      |                      |  | Port  |  |
| Stream Capability        |      | 2 streams   |                      |                      |                      |  | Audio Input   | 1 channel (RCA port)   |
| Resolution               |      | 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280                                      |                      |                      |                      |  | Audio Output  | 1 channel (RCA port)   |
|                          |      | ×720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)             |                      |                      |                      |  | Alarm Input   | 1 channel In: 5mA 3V–5VDC  |
| Bit Rate Control         |      | CBR/VBR   |                      |                      |                      |  | Alarm Output  | 1 channel Out: 300mA 12VDC   |

# Lite Series | DH-IPC-HDBW5231E-Z

#### Power

| Power Supply      | 12V DC/PoE (802.3af) |
|-------------------|----------------------|
| Power Consumption | < 6.4W               |

Environment

-30°C to +60°C (-22°F to +140°F)/less than  $\leq$  95% RH **Operating Conditions** Storage Temperature -40°C to +60°C (-40°F to +140°F) Protection Grade IP67; IK10

Structure

| Casing       | Metal                              |
|--------------|------------------------------------|
| Dimensions   | Ф122 mm × 88.9 mm (Ф4.80" × 3.50") |
| Net Weight   | 0.47 kg (1.04 lb)                  |
| Gross Weight | 0.63 kg (1.39 lb)                  |

#### **Ordering Information** Part Number Type Description 2MP WDR IR Dome Network DH-IPC-HDBW5231EP-Z Camera,PAL 2MP Camera PFA137 Junction Box PFB203W Wall Mount PFA152-E Pole Mount PFA200W Rain Shade PFA106 Mount Adapter PFB220C Celling Mount Accessories (optional) PFB200C In-Celling Mount PFM321D DC12V1A Power Adapter Single-port Long Reach Ethernet LR1002-1ET/1EC over Coax Extender PFM900-E Integrated Mount Tester PFM114 TLC SD Card

# Accessories

# **Optional:**



PFA137 Junction Box



PFA200W Rain Shade



PFB203W Wall Mount



Mount Adapter



Pole Mount



PFB220C Celling Mount



PFB200C In-Celling Mount



DC12V1A Power Adapter



LR1002-1ET/1EC Single-port Long Reach Ethernetover Coax Extender

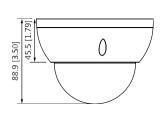


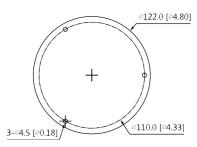
Tester

PFM114 TLC SD Card

| Junction Mount | Wall Mount       | Wall Mount | Pole Mount       |
|----------------|------------------|------------|------------------|
| PFA137         | PFA137+PFA200W   | PFB203W    | PFB203W+PFA152-E |
|                |                  |            |                  |
| Ceiling Mount  | In-Ceiling Mount |            |                  |
| PFA106+PFB220C | PFB200C          |            |                  |
|                |                  |            |                  |

# Dimensions (mm[inch])





Rev 001.001

