



# DHIPD80/28LRG/30-D-V5

8MP IP Smart Dual Illumination Active Deterrence PRO Camera

**ACTIVE DETERRENCE PRO**



**COLOUR NIGHT 2.0**  
SMART DUAL ILLUMINATION

**SMD 4.0**  
Smart Motion Detection 4.0

**PERIMETER PROTECTION**

**AI PRO**  
ARTIFICIAL INTELLIGENCE

**TWOWAY AUDIO**



8 MEGAPIXEL



2.8 MM



30m LED



30m IR



MICROPHONE



IP67

## Key Features:

- 8-MP 1/1.8" CMOS
- 8 MP (3840 × 2160) at 25/30 frames per second
- Infrared range (IR): 30 metres; Warm light range: 30 metres
- SMART H.264+/H.265+, AI H.264/H.265
- Perimeter Protection (Human and Vehicle Classification)
- Alarm: 1 input, 1 output; audio: 1 input, 1 output
- Supports up to 512 GB Micro SD card
- Two-way-Audio
- 12 VDC/PoE power supply
- IP67
- Red and blue flashing lights



## SPECIFICATIONS

|                 |                       |
|-----------------|-----------------------|
| Model Number    | DHIPD80/28LRG/30-D-V5 |
| Image Sensor    | 1/1.8" CMOS           |
| Max. Resolution | 3840 (H) × 2160 (V)   |
| ROM             | 256 MB                |
| RAM             | 2 G                   |
| Scanning System | Progressive           |

(continued)

|                                   |                                                                                           |
|-----------------------------------|-------------------------------------------------------------------------------------------|
| <b>Electronic Shutter Speed</b>   | Auto/Manual 1/3 s–1/100,000 s                                                             |
| <b>Min. Illumination</b>          | 0.0008 Lux@F1.0 (Colour, 30IRE)<br>0.0004 Lux@F1.0 (B/W, 30IRE)<br>0 lux (Illuminator on) |
| <b>S/N Ratio</b>                  | >56 dB                                                                                    |
| <b>Illumination Distance</b>      | Up to 30 m (98.43 ft) (IR)<br>Up to 30 m (98.43 ft) (Warm light)                          |
| <b>Illuminator On/Off Control</b> | Auto; Manual                                                                              |
| <b>Illuminator Number</b>         | 2 (Multi-core (IR + warm) light)                                                          |
| <b>Angle Adjustment</b>           | Pan: 0° - 360°<br>Tilt: 0° - 78°<br>Rotation: 0° - 360°                                   |

## Lens

|                             |                                                                                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lens Type</b>            | Fixed-focal                                                                                                                                        |
| <b>Lens Mount</b>           | M16                                                                                                                                                |
| <b>Focal Length</b>         | 2.8mm                                                                                                                                              |
| <b>Max. Aperture</b>        | F1.0                                                                                                                                               |
| <b>Field of View</b>        | H: 109°; V: 59°; D: 131°                                                                                                                           |
| <b>Iris Control</b>         | Fixed                                                                                                                                              |
| <b>Close Focus Distance</b> | 2.1 m (6.89 ft)                                                                                                                                    |
| <b>DORI</b>                 | <b>Detect:</b> 82.0 m(269.03 ft)<br><b>Observe:</b> 32.8 m (107.64 ft)<br><b>Recognise:</b> 16.4 m (53.81 ft)<br><b>Identify:</b> 8.2 m (26.90 ft) |

## Intelligence

|                                   |                                                                                                                                                                                                      |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IVS (Perimeter Protection)</b> | Intrusion, tripwire (the two functions support the classification and accurate detection of Humans and Vehicles)                                                                                     |
| <b>SMD</b>                        | SMD 4.0                                                                                                                                                                                              |
| <b>AcuPick</b>                    | Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets. |
| <b>AI SSA</b>                     | Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.                                                                                                         |

(continued)

|                                    |                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Smart Search</b>                | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos                                                                                                                                                                                                                                         |
| <b>Video</b>                       |                                                                                                                                                                                                                                                                                                                                                         |
| <b>Video Compression</b>           | H.265; H.264; H.264H; H.264B; MJPEG<br>(only supported by the sub stream)                                                                                                                                                                                                                                                                               |
| <b>Smart Codec</b>                 | Smart H.265+; Smart H.264+                                                                                                                                                                                                                                                                                                                              |
| <b>AI Coding</b>                   | AI H.265 (Compression rate $\geq 25\%$ )<br>AI H.264 (Compression rate $\geq 25\%$ )                                                                                                                                                                                                                                                                    |
| <b>Video Frame Rate</b>            | Main stream: $3840 \times 2160 @ (1 \text{ fps} - 25/30 \text{ fps})$<br>Sub stream: $1920 \times 1080 @ (1 - 25/30 \text{ fps})$<br>Third stream: $1920 \times 1080 @ (1 - 25/30 \text{ fps})$<br><br>*The values above are the max. frame rates of each stream;<br>for multiple streams, the values will be subjected to the total encoding capacity. |
| <b>Stream Capability</b>           | 3 streams                                                                                                                                                                                                                                                                                                                                               |
| <b>Resolution</b>                  | 8M ( $3840 \times 2160$ ); 6M ( $3200 \times 1800$ ); 5M ( $3072 \times 1728$ );<br>4M ( $2688 \times 1520/2560 \times 1440$ ); 3M ( $2304 \times 1296$ );<br>1080p ( $1920 \times 1080$ ); 720p ( $1280 \times 720$ ); D1 ( $704 \times 576/704 \times 480$ );<br>VGA ( $640 \times 480$ ); CIF ( $352 \times 288/352 \times 240$ )                    |
| <b>Bit Rate Control</b>            | CBR/VBR/ABR                                                                                                                                                                                                                                                                                                                                             |
| <b>Video Bit Rate</b>              | H.264: 3 kbps–1 6384 kbps;<br>H.265: 3 kbps–1 6384 kbps                                                                                                                                                                                                                                                                                                 |
| <b>Day/Night</b>                   | Auto(ICR) / Colour / B/W                                                                                                                                                                                                                                                                                                                                |
| <b>BLC</b>                         | Yes                                                                                                                                                                                                                                                                                                                                                     |
| <b>HLC</b>                         | Yes                                                                                                                                                                                                                                                                                                                                                     |
| <b>WDR</b>                         | 120 dB                                                                                                                                                                                                                                                                                                                                                  |
| <b>Scene Self-adaptation (SSA)</b> | Yes                                                                                                                                                                                                                                                                                                                                                     |
| <b>White Balance</b>               | Auto; natural; street lamp; outdoor; manual; regional custom                                                                                                                                                                                                                                                                                            |
| <b>Gain Control</b>                | Auto                                                                                                                                                                                                                                                                                                                                                    |
| <b>Noise Reduction</b>             | 3D NR                                                                                                                                                                                                                                                                                                                                                   |
| <b>Motion Detection</b>            | OFF/ON (4 areas, rectangular)                                                                                                                                                                                                                                                                                                                           |
| <b>Region of Interest (RoI)</b>    | Yes (4 areas)                                                                                                                                                                                                                                                                                                                                           |

(continued)

|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| <b>Smart Illumination</b> | Yes                                                                       |
| <b>Smart Dual Light</b>   | Yes                                                                       |
| <b>Defog</b>              | Yes                                                                       |
| <b>Image Rotation</b>     | 0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower) |
| <b>Mirror</b>             | Yes                                                                       |
| <b>Privacy Masking</b>    | 8 areas                                                                   |
| <b>LDC</b>                | Yes                                                                       |

#### Audio

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Built-in MIC</b>      | Yes, built-in dual Mic             |
| <b>Built-in Speaker</b>  | Yes, built-in speaker              |
| <b>Audio Compression</b> | PCM; G.711a; G.711Mu; G.726; G.723 |

#### Alarm

|                    |                                                                                                                                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Alarm Event</b> | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; intensity change; voltage detection; external alarm; SMD; security exception |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Network

|                            |                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Network Port</b>        | RJ-45 (10/100 Base-T)                                                                                                                                   |
| <b>SDK and API</b>         | Yes                                                                                                                                                     |
| <b>Network Protocol</b>    | IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP; P2P |
| <b>Interoperability</b>    | ONVIF (Profile S; Profile G; Profile T); CGI                                                                                                            |
| <b>User/Host</b>           | 20 (Total bandwidth: 64 M)                                                                                                                              |
| <b>Storage</b>             | FTP; SFTP; Micro SD card (support max. 512 GB); NAS                                                                                                     |
| <b>Browser</b>             | IE; IE11; Chrome ; Firefox                                                                                                                              |
| <b>Management Software</b> | Smart PSS Lite; DMSS                                                                                                                                    |
| <b>Mobile Client</b>       | iOS; Android                                                                                                                                            |

(continued)

**Cyber Security**

Video encryption;Firmware encryption;Configuration encryption;  
Digest;WSSE;Account lockout;Security logs;IP/MAC filtering;  
Generation and importing of X.509 certification;syslog;  
HTTPS;802.1x;Trusted boot;Trusted execution;Trusted upgrade

**Certification****Certifications**

CE-LVD: EN 62368-1;  
CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU

**Port****Audio Input**

1 channel (RCA port)

**Audio Output**

1 channel (RCA port)

**Alarm Input**

1 channel in: wet contact, 5mA 3-5 VDC

**Alarm Output**

1 channel out: wet contact, 300 mA 12 VDC

**Power****Power Supply**

12 VDC; PoE

**Dual Power Backup**

When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.

**Power Consumption**

Basic: 4.1 W (12 VDC); 6 W (PoE)  
Max. (H.265+WDR+ warm light+siren and light active deterrence + intelligence on): 8.2 W (12 VDC); 10 W (PoE)

**Environment****Operating Temperature**

−40 °C to +60 °C (−40 °F to +140 °F)

**Operating Humidity**

≤95%

**Protection**

IP67

**Structure****Casing Material**

Metal

**Product Dimensions**

Φ122.0 mm × 116.1 mm (4.80" × Φ4.57")

**Net weight**

0.8 kg (1.76 lb)

**Gross Weight**

1.0 kg (2.20 lb)

Dimensions (mm[Inch])

