



# DHIPD40/28LRG-M-E

4MP ColourNight 2.0 Smart Dual Illumination  
Fixed-focal Eyeball Network Camera

COLOURNIGHT 2.0  
SMART DUAL ILLUMINATION

AOC  
AUDIO OVER CAT5e



4 MEGAPIXEL



2.8 MM



30m LED



30m IR



MICROPHONE



IP67



## Key Features:

- 1/2.9" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2560 × 1440)@25 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in Multi-core Light, the max. IR distance is 30 m and the max.warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, DWDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Built-in Microphone.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- Supports human detection.



## SPECIFICATIONS

|                 |                     |
|-----------------|---------------------|
| Model Number    | DHIPD40/28LRG-M-E   |
| Image Sensor    | 1/2.9" CMOS         |
| Max. Resolution | 2560 (H) × 1440 (V) |
| ROM             | 16MB                |
| RAM             | 64MB                |
| Scanning System | Progressive         |

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|                                   |                                                                                            |
|-----------------------------------|--------------------------------------------------------------------------------------------|
| <b>Electronic Shutter Speed</b>   | Auto/Manual 1/3 s-1/100,000s                                                               |
| <b>Min. Illumination</b>          | 0.06 lux@F1.6 (Colour, 30 IRE);<br>0.006 lux@F1.6 (B/W, 30 IRE);<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>         | 1 (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>           | M12                                                                                                                                            |
| <b>Focal Length</b>         | 2.8mm                                                                                                                                          |
| <b>Max. Aperture</b>        | F1.6                                                                                                                                           |
| <b>Field of View</b>        | H: 94°; V: 51°; D: 110°                                                                                                                        |
| <b>Iris Control</b>         | Fixed                                                                                                                                          |
| <b>Close Focus Distance</b> | 1.1m (3.61 ft)                                                                                                                                 |
| <b>DORI</b>                 | <b>Detect:</b> 64.0 m (209.97 ft)<br><b>Observe:</b> 25.6 (83.99 ft)<br><b>Recognise:</b> 12.8m (41.99 ft)<br><b>Identify:</b> 6.4m (21.00 ft) |

## Intelligence

|                        |                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Human Detection</b> | Support the classification and accurate detection of humans                                                      |
| <b>Smart Search</b>    | Work together with smart NVR to perform refine intelligent search, event extraction and merging to event videos. |

## Video

|                          |                                                                           |
|--------------------------|---------------------------------------------------------------------------|
| <b>Video Compression</b> | H.265; H.264; H.264H; H.264B;<br>MJPEG (Only supported by the sub stream) |
| <b>Smart Codec</b>       | Smart H.265+: Smart H.264+                                                |

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|                                 |                                                                                                                                                                                                                                                                     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Video Frame Rate</b>         | <p>Main stream: 2560 × 1440@(1–25 fps)</p> <p>sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–25fps)</p> <p>*The values above are the max. frame rates of each stream;<br/>for multiple streams, the values will be subjected to the total<br/>encoding capacity.</p> |
| <b>Stream Capability</b>        | 2 streams                                                                                                                                                                                                                                                           |
| <b>Resolution</b>               | <p>4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480);</p> <p>CIF (352 × 288/352 × 240)</p>                                                                                   |
| <b>Bit Rate Control</b>         | VBR; CBR                                                                                                                                                                                                                                                            |
| <b>Video Bit Rate</b>           | <p>H.264: 32 kbps–4096 kbps;</p> <p>H.265: 12 kbps–4096 kbps</p>                                                                                                                                                                                                    |
| <b>Day / Night</b>              | Auto(ICR)/ Colour / B/W                                                                                                                                                                                                                                             |
| <b>BLC</b>                      | Yes                                                                                                                                                                                                                                                                 |
| <b>HLC</b>                      | Yes                                                                                                                                                                                                                                                                 |
| <b>WDR</b>                      | 120 dB                                                                                                                                                                                                                                                              |
| <b>White Balance</b>            | Auto; natural; street lamp; outdoor; manual; regional; custom                                                                                                                                                                                                       |
| <b>Gain Control</b>             | Auto / Manual                                                                                                                                                                                                                                                       |
| <b>Noise Reduction</b>          | 3D NR                                                                                                                                                                                                                                                               |
| <b>Motion Detection</b>         | OFF/ON (4 areas, rectangular)                                                                                                                                                                                                                                       |
| <b>Region of Interest (ROI)</b> | Yes (4 areas)                                                                                                                                                                                                                                                       |
| <b>Smart Illumination</b>       | Yes                                                                                                                                                                                                                                                                 |
| <b>Smart Dual Light</b>         | Yes                                                                                                                                                                                                                                                                 |
| <b>Image Rotation</b>           | 0°/180°                                                                                                                                                                                                                                                             |
| <b>Mirror</b>                   | Yes                                                                                                                                                                                                                                                                 |
| <b>Privacy Masking</b>          | 4 areas                                                                                                                                                                                                                                                             |
| <b>Audio</b>                    |                                                                                                                                                                                                                                                                     |
| <b>Built-in Microphone</b>      | Yes, built-in microphone                                                                                                                                                                                                                                            |
| <b>Audio Compression</b>        | G.711a; G.711Mu; PCM; G.726                                                                                                                                                                                                                                         |

**Alarm**

|                    |                                                                                                                                         |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Alarm Event</b> | Network disconnection; IP conflict; illegal access; motion detection; video tampering; audio detection; SMD (human); 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; RTCP; RTMP; SMTP; FTP<br>DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; P2P                                                                                               |
| <b>Interoperability</b>    | ONVIF (Profile S & Profile T); CGI                                                                                                                                                                           |
| <b>User/Host</b>           | 6 (Total bandwidth: 24 M)                                                                                                                                                                                    |
| <b>Storage</b>             | FTP                                                                                                                                                                                                          |
| <b>Browser</b>             | IE; Chrome; Firefox                                                                                                                                                                                          |
| <b>Management Software</b> | Smart PSS Lite; DMSS                                                                                                                                                                                         |
| <b>Mobile Client</b>       | iOS; Android                                                                                                                                                                                                 |
| <b>Cyber Security</b>      | Video Encryption; Configuration; Encryption; Digest; WSSE;<br>Account lockout; Security logs; Generation and importing of<br>X.509 certification; HTTPS; Trusted boot; Trusted execution;<br>Trusted upgrade |

**Certification**

|                       |                                                                                  |
|-----------------------|----------------------------------------------------------------------------------|
| <b>Certifications</b> | CE-LVD: EN62368-1;<br>CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU |
|-----------------------|----------------------------------------------------------------------------------|

**Power**

|                          |                                                                                                                                    |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power Supply</b>      | 12VDC/PoE (802.3af)                                                                                                                |
| <b>Power Consumption</b> | Basic: 1.6 W (12 VDC), 2.0 W (PoE);<br>Max. : 3.7 W (12 VDC), 4.7 W (PoE) (H.265 + intelligence<br>on + WDR+ warm light intensity) |

**Environment**

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>Operating Temperature</b> | −40 °C to +60 °C (−40 °F to +140 °F) |
| <b>Operating Humidity</b>    | ≤95%(RH), non-condensing             |
| <b>Storage Temperature</b>   | −40 °C to +60 °C (−40 °F to +140 °F) |
| <b>Storage Humidity</b>      | ≤95%(RH), non-condensing             |
| <b>Protection</b>            | IP67                                 |

Structure

Casing Material

Metal

Product Dimensions

85.6 mm × Φ94.0 mm (3.37" × Φ3.7")

Net Weight

0.25 kg (0.55 lb)

Gross Weight

0.36 kg (0.79 lb)

Dimensions (mm[inch])

mm [inch]

