

# HDEG-B80V-IRM1

4K Starlight Motorized Varifocal HD-AVS Bullet Camera



- 3840 × 2160 (4K)@ 15fps
- AVS/CVBS/AHD/TVI multi format output
- HLC-Pro 120 dB WDR, 3DNR, Super Adapt
- 2.7 mm–13.5 mm, Motorized Varifocal Lens
- Smart IR, Max. distance 262 feet
- Built-in Mic, IP67, 12V DC ± 30%

## System Overview

Bring 4K resolution to your HDVR coax systems with the HDEG-B80V-IRM1. With a 8MP (3840 × 2160) resolution, this motorized Varifocal bullet camera provides an excellent image under the most challenging lighting situation by utilizing Super Adapt and 120dB WDR combined with an incredible 262.47 ft (80m) IR distance. Furthermore, the camera is equipped with a built-in microphone for onboard audio and IP67 weather protection.

The camera also offers exceptional installation flexibility with AVS/ AHD/ TVI and CVBS multi format support and HD quality images with the simplicity of reusing existing coaxial infrastructure as well as compatibility with many third party coaxial recorders

## System Overview

### Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object. Smart IR technology prevents IR LEDs from whiting out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 80m (262ft).

### Multiple-format OSD

The camera supports multiple video formats including HD-AVS, CVBS, TVI and AHD. Accessing the camera's OSD allows you to quickly toggle formats, further simplifying installation and debugging. This feature makes the camera compatible with not only AVRs, but also most existing HD/SD DVRs.

### Super Adapt

This camera comes equipped with an intelligent algorithm, which enables the camera to automatically adjust parameters based on the external environment to present the optimal image.

### Simplicity

HD-AVS technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HD-AVS system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

### Wide Dynamic Range

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

### Protection (IP67, Wide Voltage)

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 rating, making it suitable for indoor or outdoor environments.

It also features ±30% input voltage tolerance, allowing it to operate under unstable power supply conditions. Its 4KV lightning rating provides protection from the effects of a lightning strike.

### Advanced 3DNR

3DNR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. IC Realtime's advanced 3DNR technology allows remarkable noise reduction with little impact to sharpness, especially under limited lighting conditions. 3DNR also effectively decreases the required bandwidth and helps lower storage space requirements.

Technical Specification

Camera

|                          |   |
|--------------------------|---|
| Image Sensor             | 8 Megapixel CMOS  |
| Effective Pixels         | 3840 (H) × 2160 (V) 8MP/4K  |
| Scanning System          | Progressive   |
| Electronic Shutter Speed | NTSC: 1/30 s–1/100000 s<br>PAL: 1/25 s–1/100000 s                                       |
| Minimum Illumination     | 0.01 lux@F1.5 (Color, 30 IRE)<br>0.001 lux@F1.5 (B/W, 30 IRE)<br>0 lux (Illuminator on) |
| S/N Ratio                | >65 dB  |
| IR Distance              | 262 ft (80 m)   |
| IR On/Off Control        | Auto / Manual   |
| IR Illuminators          | 4x IR LED   |
| Smart IR                 | Supported   |

Lens

|                      |      |   |         |           |          |
|----------------------|------|---|---------|-----------|----------|
| Lens Type            |      | Motorized Vari-focal                      |         |           |          |
| Auto Focus           |      | Supported                                 |         |           |          |
| Mount Type           |      | ø14                                       |         |           |          |
| Focal Length         |      | 2.7 mm–13.5 mm                            |         |           |          |
| Max. Aperture        |      | F1.5                                      |         |           |          |
| Angle of View        |      | Horizontal: 114°–32°<br>Vertical: 58°–17° |         |           |          |
| Focus Control        |      | Auto Focus                                |         |           |          |
| Close Focus Distance |      | 4.27 ft (1.3 m)                           |         |           |          |
| DORI Distance        | Lens | Detect                                    | Observe | Recognize | Identify |
|                      | W    | 279 ft                                    | 111 ft  | 56 ft     | 27 ft    |
|                      | T    | 918 ft                                    | 367 ft  | 183 ft    | 91ft     |

Pan/Tilt/Rotation

|                         |   |
|-------------------------|---|
| Pan/Tilt/Rotation Range | Pan: 0°–360°<br>Tilt: 0°–90°<br>Rotation: 0°–360° |
|-------------------------|---|

Video

|                 |      |   |
|-----------------|------|---|
| Resolution      |      | 4K (3840 x 2160); 5M (2880 x 1620); 4M (2560 x 1440); 1080p (1920 x 1080); 960H (960 x 576/960 x 480) |
| Frame Rate      | AVS  | NTSC: 4K@15 fps; 5M@25 fps; 4M@30 fps; 1080p@30 PAL: 4K@15 fps; 5M@25 fps; 4M@25 fps; 1080p@25 fps    |
|                 | AHD  | NTSC: 4K@15 fps<br>PAL: 4K@15 fps   |
|                 | TVI  | NTSC: 4K@15 fps<br>PAL: 4K@15 fps   |
|                 | CVBS | NTSC: 960H<br>PAL: 960H   |
| Day/Night       |      | Auto(ICR)/Color/B/W   |
| WDR             |      | 120 dB  |
| BLC Mode        |      | BLC; HLC-Prro; WDR  |
| Gain Control    |      | Auto / Manual   |
| Noise Reduction |      | 3D NR   |
| White Balance   |      | Auto;Area white balance   |
| Digital Zoom    |      | 4x  |
| Smart IR        |      | Support   |

|                 |                             |
|-----------------|-----------------------------|
| Defog           | Electronic defog            |
| Mirror          | Off/On                      |
| Privacy Masking | Off/On (8 areas, rectangle) |

Certifications

|                |                        |
|----------------|------------------------|
| Certifications | FCC Part 15 subpart B, |
|----------------|------------------------|

Interface

|                 |   |
|-----------------|---|
| Video Interface | 1 BNC port<br>Video output formats: AVS/ TVI/ AHD/ CVBS<br>(Toggled by OSD) |
| Audio Interface | Built-in Mic  |
| RS485           | N/A   |
| Alarm           | N/A   |

Electrical

|                   |  |
|-------------------|--|
| Power Supply      | DC 12V ±30% (It is recommended to use a single power adapter to supply the power for one camera) |
| Power Consumption | Max 10.6W (12 VDC, IR on)  |

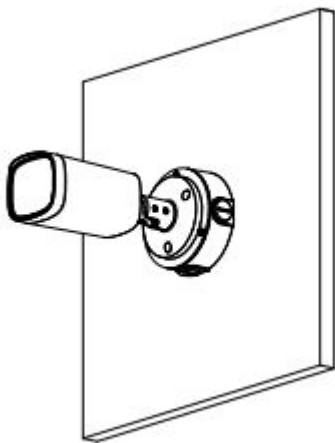
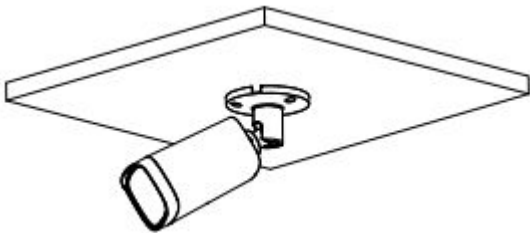
Environmental

|                      |   |
|----------------------|---|
| Operating Conditions | –22 °F to +140 °F(–30 °C to +60 °C); < 95% (non-condensation) |
| Storage Conditions   | –22 °F to +140 °F(–30 °C to +60 °C); < 95% (non-condensation) |
| Ingress Protection   | IP67  |

Construction

|              |   |
|--------------|---|
| Casing       | Metal   |
| Dimensions   | 3.56" × 3.55" × 8.25"<br>(90.4 mm × 90.1mm ×209.6 mm) |
| Net Weight   | 1.21 lb (0.55 kg)                                     |
| Gross Weight | 1.59 lb (0.72 kg)                                     |

Mounting



Dimensions (mm/in)

