# GV-EBD8800 AI 8MP H.265 Super Low Lux WDR Pro IR Eyeball IP Dome

- AI Deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/2.7" progressive scan low lux CMOS sensor
- Triple streams from H.265, H.264 or MJPEG
- Wide Dynamic Range Pro (WDR Pro)
- Min. illumination at 0.01 lux
- Up to 20 fps at 3840 x 2160
- Intelligent IR
- Day and night function (with removable IR-cut filter)
- 3-axis mechanism (pan / tilt / rotate)
- IR distance up to 30 m (100 ft)
- Ingress protection (IP67)
- Built-in micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10) for local storage
- Built-in microphone
- DC 12 V / PoE (IEEE 802.3af)
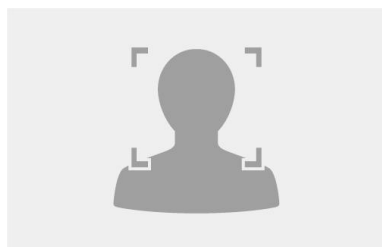- ONVIF (Profile S, G, T, M) conformant

## Introduction

The Eyeball Dome IP Camera is an outdoor, network camera equipped with an automatic IR-cut filter and IR LEDs for day and night surveillance. The camera supports H.265 video codec to achieve a better compression ratio while maintaining high-quality pictures at reduced network bandwidths. GV-EBD8800 adheres to the IP67 standard and can be powered through PoE.

Empowered by deep learning algorithms, its AI technology distinguishes humans and vehicles from other moving objects. Integrated with GeoVision Video Management Software (VMS), it supports AI perimeter protection, real-time alerts, events playback, and more.
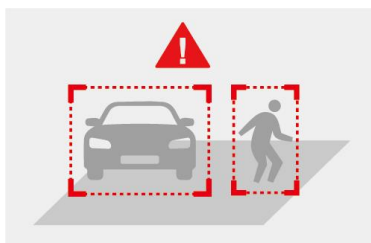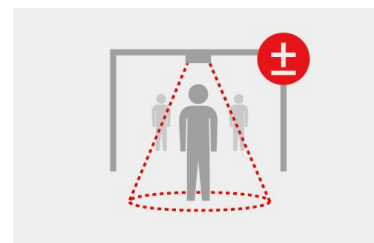
## Deep Learning Function

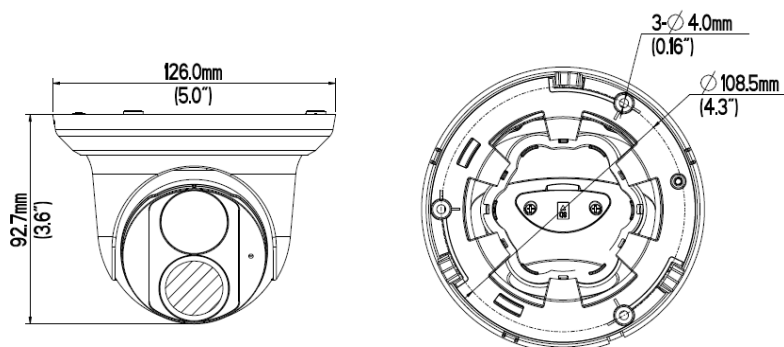**Face Detection**

**AI Perimeter Protection**
(Intrusion, Crossing Line
Entering Area, Leaving Area)

**People Flow Counting**

## Dimensions



## Specifications

| Camera | | |
|---|---|---|
| Image Sensor | | 1/2.7" progressive scan low lux CMOS |
| Picture Elements | | 3840 (H) x 2160 (V) |
| Minimum Illumination | Color | 0.01 Lux (F2.0, AGC ON) |
| | IR ON | 0 Lux |
| Shutter Speed | | Auto / Manual (1 ~ 1/100000 sec) |
| White Balance | | Auto / Manual |
| Gain Control | | Auto / Manual |
| S/N Ratio | | 56 dB |
| WDR | | WDR Pro |
| Dynamic Range | | Up to 120 dB |

| Optical Lens | | |
|---|---|---|
| Megapixel | | Yes |
| Day / Night | | Yes (with removable IR-cut filter) |
| Lens Type | | Fixed |
| Focal Length | | 2.8 mm |
| Maximum Aperture | | F/2.0 |
| Mount | | M12 |
| FOV | Horizontal | 112° |
| | Vertical | 60.1° |
| | Diagonal | 146.1° |
| Operation | Focus | Fixed |
| | Zoom | |
| | Iris | |
| IR LED Quantity | | 1 IR LED |
| Max. IR Distance | | 30 m (100 ft) |

| DORI | | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| Lens | 2.8 mm | 84 m (275.6 ft) | 33.6 m (110.2 ft) | 16.8 m (55.1 ft) | 8.4 m (27.6 ft) |

| Operation | |
|---|---|
| Video Compression | H.265, H.264, MJPEG |
| Video Streaming | Triple streams from H.265, H.264 or MJPEG |
| Frame Rate | 20 fps at 3840 x 2160, 30 fps at 3072 x 1728 / 2560 x 1440 / 1920 x 1080 (60 /50 Hz) *The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes). |
| Maximum throughput | 40 Mbps |
| Maximum stream *When the total bitrate is within the maximum throughput | 20 |
| Video Analytics | Motion Detection, Tampering Alarm, Audio Detection *Tampering alarm, Audio detection are only accessible through the camera's Web interface, which can be used to trigger alerts such as e-mail and FTP. |
| Image Setting | Brightness, Contrast, Saturation, Sharpness, Flicker-less, Image Orientation (Flip, Mirror, 0°, 90°, 180°, 270°-including Corridor format) |

| Audio Compression | G.711 |
|---|---|
| Audio Support | One-way Audio |

**Deep Learning Function**

| AI Analytics | - Perimeter Protection (Human & Vehicle classification): Cross Line, Enter Area, Leave Area, Intrusion<br>- Face Detection, People Flow Counting, Crowd Density Monitoring<br><br>*All Perimeter Protection rules can be enabled together. However, due to hardware resource limitations, only one AI function can be enabled at a time: Perimeter Protection, Face Detection, People Flow Counting, or Crowd Density Monitoring. |
|---|---|

**Video Resolution**

| Main Stream | 3840 x 2160 (Default), 3072 x 1728, 2560 x 1440, 1920 x 1080 |
|---|---|
| Sub Stream | 1920 x 1080, 1280 x 720, 720 x 576, 704 x 288, 640 x 360 (Default), 352 x 288 |
| Third Stream (Closed by Default) | 720 x 576, 704 x 288, 640 x 360, 352 x 288 |

**Network**

| Interface | 10/100 Ethernet |
|---|---|
| Protocol | 802.1X (including EAP-TLS), ARP, DHCP, DDNS, DNS, DynDNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, RTCP, RTP, RTSP, SMTP, SNMP, TCP, UDP, UPnP, ONVIF (Profile G, S, T, M) |

**Mechanical**

| Camera Angle Adjustment | Pan | 0° ~ 360° |
|---|---|---|
| | Tilt | 0° ~ 90° |
| | Rotate | 0° ~ 360° |
| Connectors | Power | DC Jack (DC 12 V, 1.25 A), PoE |
| | Audio | 1 In (built-in microphone) |
| | Local Storage | microSD card slot (SD / SDHC / SDXC), up to 512 GB |
| | Ethernet | RJ-45 |

**General**

| Environment Temperature | Start-up | -30°C ~ 60°C (-22°F ~ 140°F) |
|---|---|---|
| | Operation | |
| Humidity | | 0% ~ 95% (no condensation) |
| Power Source | | 12 V DC / PoE (IEEE 802.3af) |
| Max. Power Consumption | | 6.4 W |
| Dimensions | | Ø 126 x 92.7 mm (Ø 5.0" x 3.6") |
| Weight | | 0.45 kg (0.99 lb) |
| Ingress Protection | | IP67 |
| Certification | | CE, FCC, RoHS, UL compliant |

**Web Interface**

| Installation Management | Web-based configuration |
|---|---|
| Maintenance | Firmware upgrade through Web Browser or GV-IP Device Utility |
| Access from Web Browser | Live View, Video Recording, Change Video Quality, Bandwidth Control, Image Snapshot, Defog, Text Overlay, Image Masking |
| Language | Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese |

**Software Application**

| Software Supported | GV-VMS (V17.4.1 / V18.2.1), GV-DVR / NVR (V8.9.1), GV-Control Center (V3.8.0), GV-Recording Server / Video Gateway (V2.0.0), GV-Edge Recording Manager Win version (V2.0.0), GV-Redundant / Failover Server (V1.2.0) |
|---|---|
| Smart Device Access | GV-Eye for iOS and Android |
| Live Viewing | Browser (IE, Edge, Chrome, Firefox), Mobile App |

**Note:**

1. It is required to apply patch files to all or some of the supported software.
2. Do not use clothes or any ordinary material to clean the camera cover since they may result in scratches.
3. Specifications are subject to change without notice.
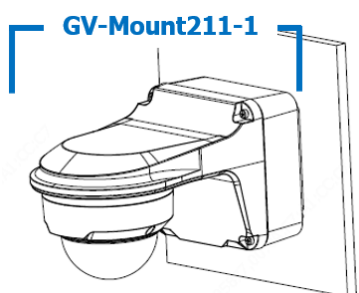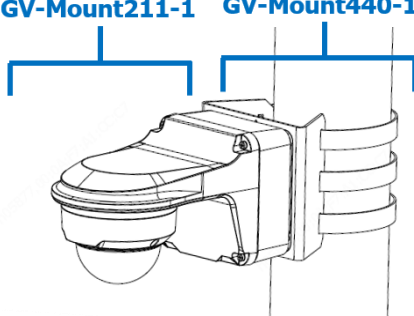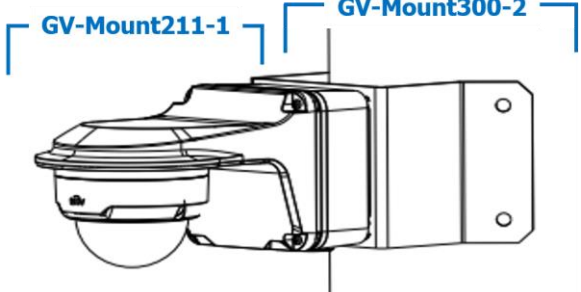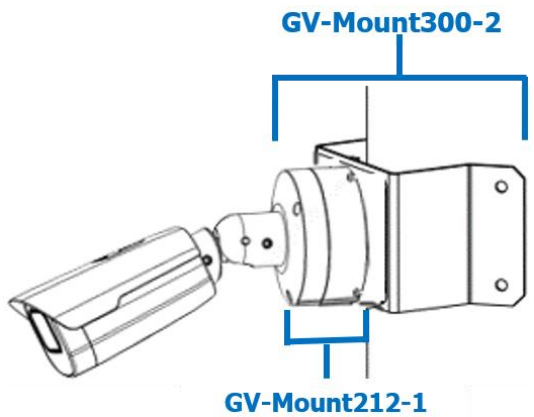
## Packing List

1. GV-EBD8800 IR Eyeball Dome
2. Waterproof Rubber Set
3. Screw Kit
4. Drill Template Paster
5. Download Guide

## Accessories

| Model No. | Name | | Details |
|---|---|---|---|
| GV-Mount107 (must be used with GV-Mount212P or GV-Mount212-1) | Pendant Bracket | | Dimensions: Ø 120 x 334 mm (Ø 4.72" x 13.15")<br>Weight: 0.74 kg (1.63 lb) |
| GV-Mount211P | Wall Mount and Junction Box | | Dimensions: Ø 233 x 125 x 125 mm (Ø 9.2" x 4.9" x 4.9")<br>Weight: 1 kg (2.2 lb) |
| GV-Mount211-1 | Wall Mount and Junction Box | | Dimensions: 235 x 126.2 x 128.5 mm (9.3" x 5.0" x 5.1")<br>Weight: 0.84 kg (1.85 lb) |
| GV-Mount212P | Wall Box Mount | | Dimensions: Ø 126 x 36 mm (Ø 5.0" x 1.4")<br>Weight: 0.22 kg (0.48 lb) |
| GV-Mount212-1 | Wall Box Mount | | Dimensions: Ø 126 x 38.5 mm (Ø 5.0" x 1.5")<br>Weight: 0.24 kg (0.53 lb) |
| GV-Mount300-2 | Convex Corner Mount | | Dimensions: 137 x 233 x 160 mm (5.4" x 9.17" x 6.3")<br>Weight: 1.65 kg (3.64 lb) |
| GV-Mount310-2 | Concave Corner Mount | | Dimensions: 111.2 x 369.9 x 210 mm (2.6" x 11.4" x 6.6")<br>Weight: 1.65 kg (3.64 lb) |
| GV-Mount420 (must be used with GV-Mount211P) | Pole Mount Bracket | | Dimensions: Ø 120 x 120 x 53.4 mm (Ø 4.7" x 4.7" x 2.1")<br>Weight: 0.45 kg (0.99 lb)<br>Steel Strap Diameter: Ø 67 ~ 127 mm (Ø 2.6" ~ 5") |
| GV-Mount440-1 (must be used with GV-Mount211P or GV-Mount211-1) | Pole Mount Bracket | | Dimensions: 136 x 127 x 63.6 mm (5.4" x 5.0" x 2.5")<br>Weight: 0.34 kg (0.75 lb)<br>Steel Strap Diameter: Ø 67 ~ 127 mm (Ø 2.6" ~ 5") |
| GV-Mount704 (must be used with GV-Mount107) | Extension Tube | | Dimensions: Ø 3.5 x 10 or 20 or 30 or 50 cm (Ø 1.38 x 3.9 or 7.9 or 11.8 or 19.7")<br>Weight: 225 g or 360 g or 500 g or 780 g (0.5 lb or 0.79 lb or 1.1 lb or 1.72 lb) |

| GV-PA191 | PoE Adapter |  | GV-PA191 is a Power over Ethernet (PoE) adapter designed to provide power to the IP device through a single Ethernet cable. |
| GV-PA301 | Gigabit PoE Adapter |  | GV-PA301 is a Gigabit Power over Ethernet (PoE) adapter. |
| GV-PoE Switch | | | GV-PoE Switch is designed to provide power along with network connection for IP devices. GV-PoE Switch is available in various models with different numbers and types of ports. |
| Power Adapter | | | Contact our sales representatives for the countries and areas supported. |

**Mounting Type**

| Wall Mount with Junction Box | Pole Mount |
|---|---|
| GV-Mount211-1 | GV-Mount211-1 + GV-Mount440-1 |
|  |  |

| Convex Corner Mount | Concave Corner Mount |
|---|---|
| GV-Mount300-2 | GV-Mount310-2 |
|  |  |

| Convex / Concave Corner Mount | Convex / Concave Corner Mount |
|---|---|
| GV-Mount211P / 211-1 + GV-Mount300-2 / 310-2 | GV-Mount212P / 212-1 + GV-Mount300-2 / 310-2 |
|  |  |

| Wall / Ceiling Box Mount | Pendant Mount | Pendant Mount with Extension Tube |
|---|---|---|
| GV-Mount212-1 | GV-Mount212-1 + GV-Mount107 | GV-Mount212-1 + GV-Mount704 + GV-Mount107 |
| GV-Mount212-1 | GV-Mount107<br>GV-Mount212-1 | GV-Mount107<br>GV-Mount704<br>GV-Mount212-1 |