

## GV-GEBN4800 AI 4MP H.265 Full Color AI-ISP Warm LED WDR Pro Eyeball Dome IP Camera



- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/1.79" progressive scan CMOS sensor
- Triple streams from H.265, H.264 or MJPEG
- Min. illumination at 0.0001 lux
- Up to 30 fps at 2688 x 1520
- AI-ISP for superior noise reduction and vivid color images, day and night
- Smart warm LED distance up to 30 m (100 ft)
- Wide Dynamic Range Pro (WDR Pro)
- Built-in microphone
- Built-in microSD card slot (SD / SDHC / SDXC) for local storage
- 3-axis mechanism (pan / tilt / rotate)
- Ingress protection (IP67)
- Vandal resistance (IK10 for metal casing)
- DC 12V / PoE (IEEE 802.3af)
- Defog
- 3D noise reduction
- Smart settings (Line Crossing, Region Entrance, Region Exiting, Target Counting, Region Intrusion, Face Detection)
- Motion detection
- Text overlay
- Privacy mask
- 20 languages supported
- ONVIF (Profile G, S, T, M) conformant

### Introduction

GV-GEBN4800 is an eyeball dome IP camera equipped with AI-ISP technology and smart warm LEDs for full color surveillance, even in challenging lighting conditions. The camera combines H.265 compression, PoE support, and rugged IP67/IK10 protection for reliable operation in demanding environments.

Empowered by deep learning algorithms, its AI technology distinguishes humans and vehicles from other moving objects. When integrated with GeoVision Video Management Software (VMS), it supports AI perimeter protection, real-time alert, event playback, and more.

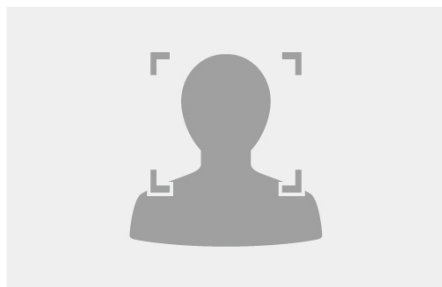
The **AI-ISP** (Artificial Intelligence Image Signal Processor) enhances image quality in low-light scenes by delivering more detail, reducing noise, and minimizing smearing issues. Optimized for environments with at least minimal ambient light—such as moonlit outdoor areas—the camera delivers superior results in outdoor installations.

### Models

| Model          | Iris  | Focal Length (mm) | Horizontal FOV | Maximum Aperture | Image Format |
|----------------|-------|-------------------|----------------|------------------|--------------|
| GV-GEBN4800-2F | Fixed | 2.8 mm            | 112°           | F/1.0            | 1/1.79"      |
| GV-GEBN4800-3F |       | 3.6 mm            | 96°            |                  |              |

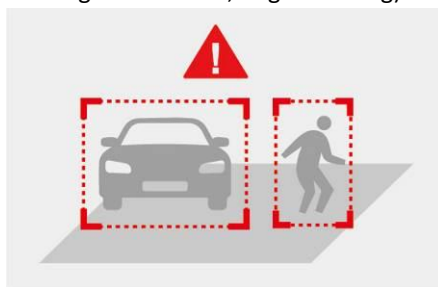
## Deep Learning Function

### Face Detection

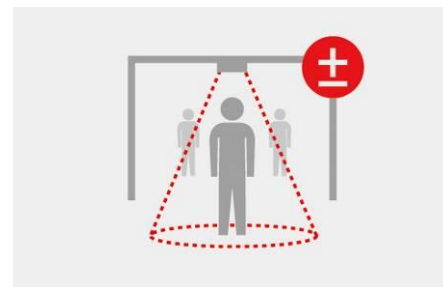


### AI Perimeter Protection

(Region Intrusion, Line Crossing, Region Entrance, Region Exiting)



### People Counting



## Specifications

| Camera                 |            |                                                                                                                            |                |                |               |
|------------------------|------------|----------------------------------------------------------------------------------------------------------------------------|----------------|----------------|---------------|
| Image Sensor           |            | 1/1.79" progressive scan CMOS                                                                                              |                |                |               |
| Picture Elements       |            | 2688 (H) x 1520 (V)                                                                                                        |                |                |               |
| Minimum Illumination   | Color      | 0.0001 Lux (F1.0, AGC ON)                                                                                                  |                |                |               |
|                        | B/W        | N/A                                                                                                                        |                |                |               |
|                        | LED On     | 0 Lux                                                                                                                      |                |                |               |
| Shutter Speed          |            | Automatic / Manual (1/3 ~ 1/100000 sec)                                                                                    |                |                |               |
| White Balance          |            | Automatic, Manual                                                                                                          |                |                |               |
| Gain Control           |            | Automatic, Manual                                                                                                          |                |                |               |
| S/N Ratio              |            | 50 dB                                                                                                                      |                |                |               |
| WDR Pro                |            | Yes (supported in the next version)                                                                                        |                |                |               |
| Dynamic Range          |            | 120 dB (supported in the next version)                                                                                     |                |                |               |
| Lens                   |            | GV-GEBN4800-2F                                                                                                             |                | GV-GEBN4800-3F |               |
| Megapixel              |            | 4 MP                                                                                                                       |                |                |               |
| Day / Night            |            | Color                                                                                                                      |                |                |               |
| Lens Type              |            | Fixed                                                                                                                      |                |                |               |
| Focal Length           |            | 2.8 mm                                                                                                                     |                | 3.6 mm         |               |
| Maximum Aperture       |            | F/1.0                                                                                                                      |                |                |               |
| Mount                  |            | M12                                                                                                                        |                |                |               |
| FOV                    | Horizontal | 112°                                                                                                                       |                | 96°            |               |
|                        | Vertical   | 61°                                                                                                                        |                | 51°            |               |
|                        | Diagonal   | 132°                                                                                                                       |                | 112°           |               |
| Operation              | Focus      | Auto / Manual                                                                                                              |                |                |               |
|                        | Zoom       | Fixed                                                                                                                      |                |                |               |
|                        | Iris       | Fixed                                                                                                                      |                |                |               |
| Warm LED Quantity      |            | 3 warm LEDs                                                                                                                |                |                |               |
| Max. Warm LED Distance |            | 30 m (100 ft)                                                                                                              |                |                |               |
| DORI                   |            | Detect                                                                                                                     | Observe        | Recognize      | Identify      |
| Lens                   | 2.8 mm     | 52 m (170.6 ft)                                                                                                            | 21 m (68.8 ft) | 10 m (32.8 ft) | 5 m (16.4 ft) |
|                        | 3.6 mm     | 63 m (206.6 ft)                                                                                                            | 25 m (82.0 ft) | 12 m (39.3 ft) | 6 m (19.6 ft) |
| Operation              |            |                                                                                                                            |                |                |               |
| Video Compression      |            | H.265, H.265+, H.264, H.264+, MJPEG                                                                                        |                |                |               |
| Video Streaming        |            | Triple streams from H.265, H.264 or MJPEG                                                                                  |                |                |               |
| Frame Rate             |            | 30 fps at 2688 x 1520, 2560 x 1440, 1920 x 1080, 1280 x 720, 704 x 480, 640 x 480, 640 x 360, 480 x 240, 352 x 240 (60 Hz) |                |                |               |
|                        |            | 25 fps at 2688 x 1520, 2560 x 1440, 1920 x 1080, 1280 x 720, 704 x 567, 640 x 480, 640 x 360, 480 x 240, 352 x 288 (50 Hz) |                |                |               |
|                        |            | *The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).      |                |                |               |

|                                                                             |                                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------|
| Maximum Throughput                                                          |                                                                                                                                                                                                            | 80 Mbps                                                                                                                                                                   |                                                                                          |                          |
| Maximum Streams<br>*When the total bitrate is within the maximum throughput |                                                                                                                                                                                                            | 10                                                                                                                                                                        |                                                                                          |                          |
| Video Analytics                                                             |                                                                                                                                                                                                            | Motion Detection, Video Exception Detection (Abnormal Color Detection, Scene Change, Video Blur), Object Abandoned/Missing Detection                                      |                                                                                          |                          |
| Smart Alarm                                                                 |                                                                                                                                                                                                            | Audio Exception, Cable Disconnection, IP Address Conflict, SD Card Error, SD Card Full                                                                                    |                                                                                          |                          |
| Image Setting                                                               |                                                                                                                                                                                                            | Brightness, Contrast, Hue, Saturation, Sharpness, Defog, Antiflicker, 3D Noise Reduction, Image Orientation (Flip, Mirror, 0°, 90°, 180°, 270°-including Corridor format) |                                                                                          |                          |
| Audio Compression                                                           |                                                                                                                                                                                                            | G.711                                                                                                                                                                     |                                                                                          |                          |
| Audio Support                                                               |                                                                                                                                                                                                            | One-way audio                                                                                                                                                             |                                                                                          |                          |
| Video Resolution                                                            |                                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| Main Stream                                                                 | 2688 x 1520 (Default), 2560 x 1440, 1920 x 1080                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| Sub Stream                                                                  | 1280 x 720 (Default), 704 x 480, 704 x 567, 640 x 480, 640 x 360, 480 x 240, 352 x 240, 352 x 288                                                                                                          |                                                                                                                                                                           |                                                                                          |                          |
| Third Stream                                                                | 1280 x 720 (Default), 704 x 480, 704 x 567, 640 x 480, 640 x 360, 480 x 240, 352 x 240, 352 x 288                                                                                                          |                                                                                                                                                                           |                                                                                          |                          |
| Network                                                                     |                                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| Interface                                                                   | 10/100 Ethernet                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| Protocol                                                                    | 802.1x, API, DDNS, DHCP, FTP, HTTP, HTTP POST, HTTPS, IPv4, IPv6, NTP, ONVIF (Profile G, S, T, M), PPPoE, QoS, RTCP, RTMP, RTP, RTSP, SMTP, SNMP, UDP, UPnP                                                |                                                                                                                                                                           |                                                                                          |                          |
| Deep Learning Function                                                      |                                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| AI Perimeter Protection                                                     | Face Event: Face Detection<br>Smart Event:<br>- Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Target Counting<br><br>*Face events and smart events cannot be enabled at the same time. |                                                                                                                                                                           |                                                                                          |                          |
| Mechanical                                                                  |                                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| Camera Angle Adjustment                                                     | Pan                                                                                                                                                                                                        | 0° ~ 360°                                                                                                                                                                 |                                                                                          |                          |
|                                                                             | Tilt                                                                                                                                                                                                       | 0° ~ 80°                                                                                                                                                                  |                                                                                          |                          |
|                                                                             | Rotate                                                                                                                                                                                                     | 0° ~ 360°                                                                                                                                                                 |                                                                                          |                          |
| Connectors                                                                  | Power                                                                                                                                                                                                      | DC Jack                                                                                                                                                                   |                                                                                          |                          |
|                                                                             | Ethernet                                                                                                                                                                                                   | RJ-45                                                                                                                                                                     |                                                                                          |                          |
|                                                                             |                                                                                                                                                                                                            | Audio                                                                                                                                                                     | Built-in microphone                                                                      | Yes                      |
|                                                                             |                                                                                                                                                                                                            |                                                                                                                                                                           | External microphone required                                                             | Yes (Audio jack, 3.5 mm) |
|                                                                             |                                                                                                                                                                                                            |                                                                                                                                                                           | Built-in speaker                                                                         | No                       |
|                                                                             |                                                                                                                                                                                                            |                                                                                                                                                                           | External speaker required                                                                | No                       |
|                                                                             |                                                                                                                                                                                                            |                                                                                                                                                                           | * For devices with microphone or speaker, choose either the built-in or external option. |                          |
|                                                                             | * If equipped with an Audio In port, it only supports microphones with power supply.                                                                                                                       |                                                                                                                                                                           |                                                                                          |                          |
|                                                                             | Digital I/O                                                                                                                                                                                                | N/A                                                                                                                                                                       |                                                                                          |                          |
| Local Storage                                                               | microSD card slot (SD / SDHC / SDXC), up to 512 GB                                                                                                                                                         |                                                                                                                                                                           |                                                                                          |                          |
| General                                                                     |                                                                                                                                                                                                            |                                                                                                                                                                           |                                                                                          |                          |
| Operation Temperature                                                       |                                                                                                                                                                                                            | -30 ~ 60°C (-22 ~ 140°F)                                                                                                                                                  |                                                                                          |                          |
| Humidity                                                                    |                                                                                                                                                                                                            | 0% ~ 95% (no condensation)                                                                                                                                                |                                                                                          |                          |
| Power Source                                                                |                                                                                                                                                                                                            | DC 12V, 1.5A / PoE (IEEE 802.3af)                                                                                                                                         |                                                                                          |                          |
| Max. Power Consumption                                                      |                                                                                                                                                                                                            | 6.5 W                                                                                                                                                                     |                                                                                          |                          |
| Dimensions                                                                  |                                                                                                                                                                                                            | ∅ 111.6 x 99.3 mm (∅ 4.39" x 3.91")                                                                                                                                       |                                                                                          |                          |
| Weight                                                                      |                                                                                                                                                                                                            | 0.62 kg (1.37 lb)                                                                                                                                                         |                                                                                          |                          |
| Ingress Protection                                                          |                                                                                                                                                                                                            | IP67                                                                                                                                                                      |                                                                                          |                          |
| Vandal Resistance                                                           |                                                                                                                                                                                                            | IK10 for metal casing                                                                                                                                                     |                                                                                          |                          |
| Certification                                                               |                                                                                                                                                                                                            | CE, FCC, RoHS 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, Playback, Video Recording, Image Quality, Bandwidth Control, Image Snapshot, One-way Audio, Digital Zoom, Text Overlay, Image Masking, Intelligent Mark        |                                                                                          |                          |

|                     |                                                                                                                                                                                                                                                                     |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Language            | Czech, Dutch, English, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Spanish (Latin America), Traditional Chinese, Turkish, Ukrainian                                                     |
| <b>Applications</b> |                                                                                                                                                                                                                                                                     |
| Software Supported  | GV-VMS (V17.4.8 / V18.3.5 + Patch or later / V20.0.0 or later), GV-Control Center (V4.2.1 + Patch or later), GV-Edge Recording Manager for Windows (V2.3.0 + Patch or later), GV-Recording Server (V2.1.1 + Patch or later), GV-IP Device Utility (V9.0.3 or later) |
| Smart Device Access | GV-Eye for iOS and Android (V3.4.1 or later)                                                                                                                                                                                                                        |
| Live Viewing        | Web Browser (Chrome, Edge, Firefox, Safari), Mobile App                                                                                                                                                                                                             |

**Note:**

1. The AI-ISP may not perform as expected in completely dark environments. **For optimal results, outdoor installation is recommended.**
2. All specifications are subject to change without notice.

### Packing List

- |                             |                          |
|-----------------------------|--------------------------|
| 1. GV-GEBN4800 Eyeball Dome | 4. Hex Key               |
| 2. Waterproof Rubber Set    | 5. Drill Template Paster |
| 3. Screw kit                | 6. Download Guide        |

### Accessories

| Model No.                                                                            | Name                       |                                                                                     | Details                                                                                                                     |
|--------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| GV-Mountt211-4                                                                       | Wall Mount Bracket         |   | Dimensions: 129.8 x 154.9 x 74.4 mm<br>(5.11 x 6.1 x 2.93 in)<br>Weight: 0.527 kg (1.16 lb)                                 |
| GV-Mount211-6<br>(must be used with<br>GV-Mount506)                                  | Wall Mount Bracket         |  | Dimensions: 199 x 139.3 x 140.8 mm<br>(7.83 x 5.48 x 5.54 in)<br>Weight: 0.56 kg (1.23 lb)                                  |
| GV-Mount470<br>(must be used with<br>GV-Mount211-6 + GV-Mount506,<br>or GV-Mount506) | Pole Mount Bracket         |  | Dimensions: 163.3 x 54.5 x 215 mm<br>(6.43 x 2.15 x 8.46 in)<br>Weight: 1.10 kg (2.43 lb)                                   |
| GV-Mount506                                                                          | Junction Box               |  | Dimensions: 39.3 x 171.6 x 50 mm<br>(5.48 x 2.81 x 1.97")<br>Weight: 0.51 kg (1.13 lb)                                      |
| GV-Mount927<br>(for standard US single and double<br>gang boxes only)                | Power Box Mount<br>Bracket |  | Dimensions: Ø 145 x 11.2 mm<br>(Ø 5.71 x 0.44 in)<br>Weight: 0.2 kg (0.44 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 | The GV-POE Switch is designed to provide power along with network connection for IP devices. The 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 Bracket<br>GV-Mount211-4                                               | Junction Box<br>GV-Mount506                                                       | Junction Box<br>GV-Mount506                                                         | Wall Mount Bracket<br>GV-Mount211-6 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|
|  |  |  |                                     |

| Junction Box<br>GV-Mount506 | Wall Mount Bracket<br>GV-Mount211-6                                                  | Pole Mount Bracket<br>GV-Mount470 |
|-----------------------------|--------------------------------------------------------------------------------------|-----------------------------------|
|                             |  |                                   |

| Junction Box<br>GV-Mount506 | Pole Mount Bracket<br>GV-Mount470                                                   |
|-----------------------------|-------------------------------------------------------------------------------------|
|                             |  |

## Dimensions

