

## **GV-GEB4900 Cloud AI 4MP H.265 Super Low Lux WDR Pro IR Eyeball Dome IP**

### **Camera**



- Direct-to-Cloud
- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/3" progressive scan CMOS sensor
- Min. illumination at 0.005 lux
- Triple streams from H.265, H.264 or MJPEG
- Up to 30 fps at 2688 x 1520
- Intelligent IR
- IR distance up to 30 m (100 ft)
- Day and Night function (with removable IR-cut filter)
- Vandal resistance (IK10 for metal casing)
- Ingress protection (IP67)
- 3-axis mechanism (pan / tilt / rotate)
- DC 12V / PoE (IEEE 802.3af)
- Built-in microSD card slot (SD / SDHC / SDXC) for local storage
- Two-way audio capable
- Built-in microphone
- Wide Dynamic Range Pro (WDR Pro)
- Defog
- 3D noise reduction
- GV-Center V2 connection
- AI analytics (Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Target Counting, Heat Map, Loitering Detection, Illegal Parking Detection, Face Detection, Video Metadata)
- Motion detection
- Text overlay
- Privacy mask
- 19 languages supported
- ONVIF (Profile G, S, T, M) conformant

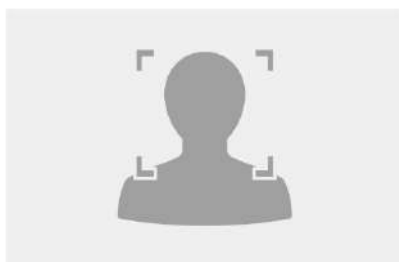
### **Introduction**

GV-GEB4900 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. The camera adheres to IK10 and IP67 standards, 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 alert, events playback, and more. By connecting the camera to the cloud-based data center and video surveillance solution, GV-Cloud VMS, thousands of on-site videos, alarm devices, and AI events can be monitored and managed from a single platform.

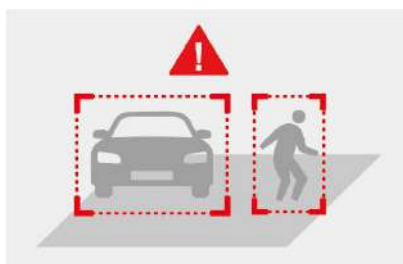
## Deep Learning Function

### Face Detection

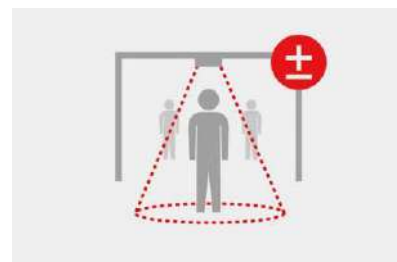


### AI Perimeter Protection

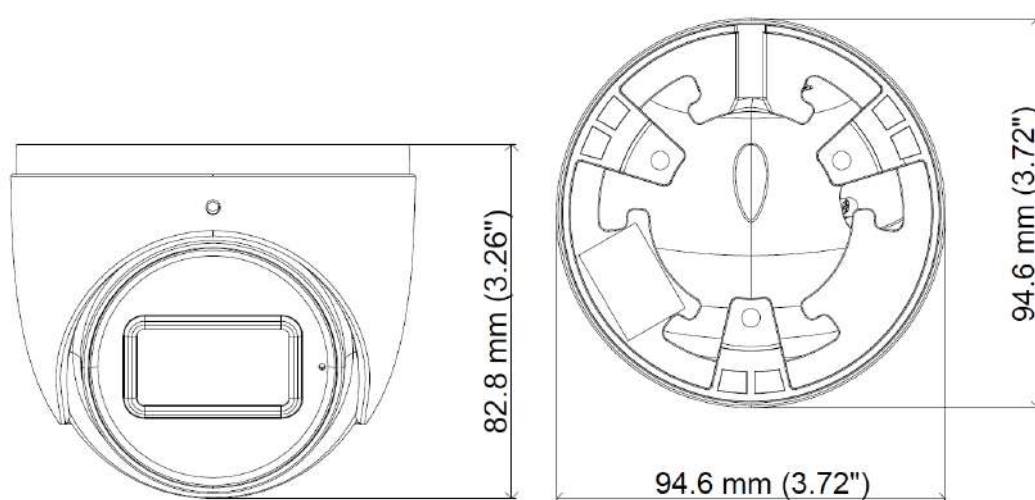
(Region Intrusion, Line Crossing,  
Region Entrance, Region Exiting)



### People Counting



## Dimensions



## Specifications

| Camera               |            |                                         |
|----------------------|------------|-----------------------------------------|
| Image Sensor         |            | 1/3" progressive scan CMOS              |
| Picture Elements     |            | 2688 (H) x 1520 (V)                     |
| Minimum Illumination | Color      | 0.005 Lux (F1.6, AGC ON)                |
|                      | IR 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                  |            | WDR Pro                                 |
| Dynamic Range        |            | 120 dB                                  |
| Lens                 |            |                                         |
| Megapixel            |            | 4MP                                     |
| Day / Night          |            | Yes (with removable IR-cut filter)      |
| Lens Type            |            | Fixed                                   |
| Focal Length         |            | 2.8 mm                                  |
| Maximum Aperture     |            | F/1.6                                   |
| Mount                |            | M12                                     |
| FOV                  | Horizontal | 95.3°                                   |
|                      | Vertical   | 53.2°                                   |
|                      | Diagonal   | 100.7°                                  |
| Operation            | Focus      | Fixed                                   |
|                      | Zoom       | Fixed                                   |
|                      | Iris       | Fixed                                   |
| IR LED Quantity      |            | 1 LED                                   |
| Max. IR Distance     |            | 30 m (100 ft)                           |

| DORI                                                                        |                   | Detect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Observe                             | Recognize        | Identify        |
|-----------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------|-----------------|
| Lens                                                                        | 2.8 mm            | 60.6 m (198.8 ft)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 24.2 m (79.3 ft)                    | 12.1 m (39.6 ft) | 6.0 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                  |                 |
| Video Resolution                                                            | Main Stream       | 2688 x 1520 (Default), 2592 x 1520, 2560 x 1440, 2304 x 1296, 1920 x 1080                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                  |                 |
|                                                                             | Sub Stream        | 1280 x 720 (Default), 704 x 576, 704 x 480, 640 x 480, 640 x 360, 480 x 240, 352 x 240                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                     |                  |                 |
|                                                                             | Third Stream      | 1280 x 720 (Default), 704 x 576, 704 x 480, 480 x 240, 352 x 240                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                     |                  |                 |
| Frame Rate                                                                  |                   | 30 fps at 2688 x 1520 / 2592 x 1520 / 2560 x 1440 / 2304 x 1296 / 1920 x 1080 / 1280 x 720 / 704 x 480 / 640 x 480 / 640 x 360 / 480 x 240 / 352 x 240 (60 Hz)<br><br>25 fps at 2688 x 1520 / 2592 x 1520 / 2560 x 1440 / 2304 x 1296 / 1920 x 1080 / 1280 x 720 / 704 x 576 / 640 x 480 / 640 x 360 / 480 x 240 / 352 x 288 (50 Hz)<br><br>*The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).                                                                                                                            |                                     |                  |                 |
| Maximum Throughput                                                          |                   | 64 Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                  |                 |
| Maximum Streams<br>*When the total bitrate is within the maximum throughput |                   | 8<br><br>*By default, 2 connections are occupied whether connected to GV-Cloud VMS or not.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                  |                 |
| 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                                                               |                   | ROI, Brightness, Contrast, Saturation, Sharpness, Flicker-less, 3D Noise Reduction, Image Orientation (Flip, Mirror, 0°, 90°, 180°, 270°-including Corridor format)                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |                  |                 |
| Dual Redundant Images                                                       |                   | Yes (for failsafe firmware upgrade)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |                  |                 |
| Audio Compression                                                           |                   | G.711                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                  |                 |
| Audio Support                                                               |                   | Two-way audio (external speaker required)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                  |                 |
| Deep Learning Function                                                      |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |                  |                 |
| AI Analytics                                                                |                   | Face Event: Face Detection<br><br>Smart Event:<br>- Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Target Counting, Heat Map, Video Metadata: Human & Vehicle classification<br>- Loitering Detection, Illegal Parking Detection<br><br>*Face events and smart events cannot be enabled at the same time.<br>*A maximum of 2 smart detection functions are suggested at a time to ensure comprehensive detection results and the optimized performance by the camera.<br>*Once connected to GV-Cloud VMS / GV-Center V2, up to 2 smart detection functions are supported. |                                     |                  |                 |
| Video Metadata                                                              | People            | Gender, Age, Top / Bottom (Type, Color), Accessories (Hat, Bag, Face Mask, Glasses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |                  |                 |
|                                                                             | Vehicle           | Type, Color, Brand, Model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                  |                 |
|                                                                             | Non-Motor Vehicle | Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                  |                 |
| Network                                                                     |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |                  |                 |
| Interface                                                                   |                   | 10/100 Ethernet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |                  |                 |
| Protocol                                                                    |                   | 802.1X authentication (EAP-TLS, EAP-MD5), DDNS, DHCP, FTP, HTTP, HTTPS, IPv4, IPv6, NTP, ONVIF (Profile G, S, T, M), PPPoE, QoS, RTCP, RTMP, RTP, RTSP, SMTP, SNMP, UDP, UPnP                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |                  |                 |
| Mechanical                                                                  |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |                  |                 |
| Camera Angle Adjustment                                                     | Pan               | 0° ~ 360°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                  |                 |
|                                                                             | Tilt              | 0° ~ 75°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                     |                  |                 |
|                                                                             | Rotate            | 0° ~ 360°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |                  |                 |
| Connectors                                                                  | Power             | DC Jack (DC 12V, 1 A) / PoE (IEEE 802.3af)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                     |                  |                 |
|                                                                             | Ethernet          | RJ-45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                  |                 |
|                                                                             | Audio             | Built-in microphone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes                                 |                  |                 |
|                                                                             |                   | External microphone required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Yes (audio jack, 3.5 mm or 0.14 in) |                  |                 |
|                                                                             |                   | Built-in speaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No                                  |                  |                 |
| External speaker required                                                   |                   | Yes (audio jack, 3.5 mm or 0.14 in)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |                  |                 |

|                              |               |                                                                                                                                                                                                                                                                                 |
|------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              |               | * Choose either the built-in or external option for devices with a microphone or speaker.<br>* The Audio In port only supports microphones with a power supply.                                                                                                                 |
|                              | Local Storage | microSD card slot (SD / SDHC / SDXC), up to 256 GB                                                                                                                                                                                                                              |
| <b>General</b>               |               |                                                                                                                                                                                                                                                                                 |
| Operation Temperature        |               | -30 ~ 60°C (-22 ~ 140°F)                                                                                                                                                                                                                                                        |
| Humidity                     |               | 0% ~ 95% (no condensation)                                                                                                                                                                                                                                                      |
| Power Source                 |               | DC 12V / PoE (IEEE 802.3af)                                                                                                                                                                                                                                                     |
| Max. Power Consumption       |               | 7 W                                                                                                                                                                                                                                                                             |
| Dimensions                   |               | Ø 94.6 x 82.8 mm (Ø 3.72" x 3.26")                                                                                                                                                                                                                                              |
| Weight                       |               | 0.46 kg (1.01 lb)                                                                                                                                                                                                                                                               |
| Ingress Protection           |               | IP67                                                                                                                                                                                                                                                                            |
| Vandal Resistance            |               | IK10 for metal casing                                                                                                                                                                                                                                                           |
| Certification                |               | CE, FCC, RoHS, UKCA, UL compliant                                                                                                                                                                                                                                               |
| <b>Web Interface</b>         |               |                                                                                                                                                                                                                                                                                 |
| Installation Management      |               | Web-based configuration                                                                                                                                                                                                                                                         |
| Maintenance                  |               | Firmware upgrade through Web Browser or Utility                                                                                                                                                                                                                                 |
| Access from Web Browser      |               | Live View, Playback, Video Recording, Image Quality, Bandwidth Control, Image Snapshot, Two-way Audio Capable, Digital Zoom, Text Overlay, Image Masking, Intelligent Mark                                                                                                      |
| Language                     |               | Chinese Traditional, Czech, Dutch, English, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Spanish (Latin America), Turkish                                                                           |
| <b>Software Applications</b> |               |                                                                                                                                                                                                                                                                                 |
| Software Supported           |               | GV-VMS (V17.4.8 / V18.3.3 / V20.0.0 or later), GV-Edge Recording Manager (V2.2.8 or later), GV-Control Center (V4.2.0 or later), GV-Recording Server (V2.1.1 or later), GV-Center V2 (V18.4.1 or later), GV-Cloud VMS (V1.3.0 or later), GV-IP Device Utility (V8.9.9 or later) |
| Smart Device Access          |               | GV-Eye for iOS and Android (V3.2.0 or later)                                                                                                                                                                                                                                    |
| Live Viewing                 |               | Web Browser (Edge, IE mode in Edge, Chrome, Firefox, Safari), Mobile App                                                                                                                                                                                                        |

#### Note:

1. To use GV-Cloud VMS, avoid connecting to other GV-Software at the same time.
2. To use GV-Cloud VMS, a microSD card must be installed. Industrial-grade microSD cards are recommended to avoid event recordings writing failure.
3. Upon the initial connection of GV-Cloud IP Cameras to GV-Cloud VMS, the Standard Plan will be provided for free for 180 days.
4. GV-Center V2 Standard / Pro can only receive motion events from GV-Cloud IP Cameras. To receive AI and PVD events, GV-Center V2 AI is required.
5. All specifications are subject to change without notice.

## Packing List

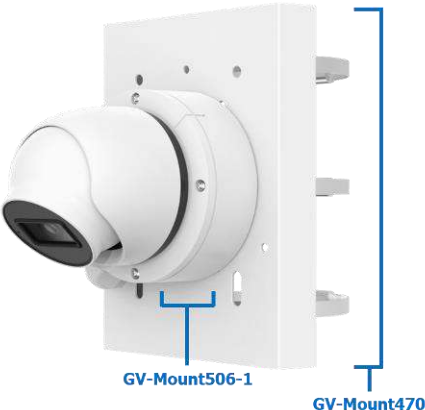
- |                           |                          |
|---------------------------|--------------------------|
| 1. GV-GE4900 Eyeball Dome | 4. Drill Template Paster |
| 2. Waterproof Rubber Set  | 5. Download Guide        |
| 3. Screw kit              |                          |

## Accessories

| Model No.                                           | Name               |                                                                                      | Details                                                                                   |
|-----------------------------------------------------|--------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| GV-Mount117<br>(must be used with<br>GV-Mount506-1) | Pendant Mount      |   | Dimensions: Ø 121 x 191.4 mm<br>(Ø 4.76 x 7.54 in)<br>Weight: 0.4 kg (0.88 lb)            |
| GV-Mount211-4                                       | Wall Mount Bracket |  | Dimensions: 129.5 x 155 x 74.5 mm<br>(5.10 x 6.10 x 2.93 in)<br>Weight: 0.53 kg (1.16 lb) |

|                                                                                          |                                                                                                                                                                                      |                                                                                      |                                                                                                                             |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| GV-Mount211-8<br>(must be used with<br>GV-Mount506-1)                                    | Wall Mount Bracket                                                                                                                                                                   |    | Dimensions: 188.4 x 121 x 137.3 mm<br>(7.41 x 4.76 x 5.4 in)<br>Weight: 0.52 kg (1.15 lb)                                   |
| GV-Mount314<br>(must be used with<br>GV-Mount211-8 + GV-Mount506-1,<br>or GV-Mount506-1) | Corner Mount Bracket                                                                                                                                                                 |     | Dimensions: 215x121.4x215mm<br>(8.46 x 4.78 x 8.46 in)<br>Weight: 2.05 kg (4.52 lb)                                         |
| GV-Mount470<br>(must be used with<br>GV-Mount211-8 + GV-Mount506-1,<br>or GV-Mount506-1) | 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-Mount506-1                                                                            | Junction Box                                                                                                                                                                         |     | Dimensions: 117.9 x 143.3 x 47 mm<br>(4.64 x 5.64 x 1.85 in)<br>Weight: 0.38 kg (0.84 lb)                                   |
| GV-Mount507                                                                              | Junction Box                                                                                                                                                                         |   | Dimensions: Ø 96 x 38.8 mm<br>(Ø 3.78 x 1.53 in)<br>Weight: 0.135 kg (0.30 lb)                                              |
| GV-Mount707<br>(must be used with<br>GV-Mount117)                                        | Extension Tube                                                                                                                                                                       |   | Dimensions: Ø 37 x 515 mm<br>(Ø 1.46 x 20.28 in)<br>Weight: 0.8 kg (1.76 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                                                                            | 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 Bracket Mount                                                               | Junction Box Mount                                                                | Junction Box Mount                                                                 | Pole Bracket Mount |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------|
| GV-Mount211-4                                                                    | GV-Mount506-1                                                                     | GV-Mount506-1                                                                      | GV-Mount470        |
|  |  |  |                    |

| Junction Box Mount                                                                 | Junction Box Mount                                                                  | Wall Bracket Mount |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|
| GV-Mount507                                                                        | GV-Mount506-1                                                                       | GV-Mount211-8      |
|  |  |                    |

| Junction Box Mount                                                                   | Corner Bracket Mount |
|--------------------------------------------------------------------------------------|----------------------|
| GV-Mount506-1                                                                        | GV-Mount314          |
|  |                      |

| Junction Box Mount | Wall Bracket Mount | Corner Bracket Mount |
|--------------------|--------------------|----------------------|
| GV-Mount506-1      | GV-Mount211-8      | GV-Mount314          |



| Junction Box Mount | Wall Bracket Mount | Pole Bracket Mount |
|--------------------|--------------------|--------------------|
| GV-Mount506-1      | GV-Mount211-8      | GV-Mount470        |



| Junction Box Mount | Pendant Mount |
|--------------------|---------------|
| GV-Mount506-1      | GV-Mount117   |

