GV-GEBF2802　AI 2MP H.265 Super Low Lux WDR Pro Full Color Warm LED IR Eyeball Dome IP Camera

- AI deep learning: Smart Perimeter Protection & Classification (Human, Vehicle)
- 1/2.8" progressive scan CMOS sensor
- Min. illumination at 0.008 lux
- Triple streams from H.265, H.264 or MJPEG
- Up to 30 fps at 1920 x 1080
- Smart warm LED distance up to 30 m (100 ft)
- Intelligent IR
- Wide Dynamic Range Pro (WDR Pro)
- IR distance up to 30 m (100 ft)
- 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)
- 3D noise reduction
- AI analytics (Line Crossing, Region Intrusion)
- Smart lighting switch between IR LED (for motion detection) and Warm LED (for people, vehicle, and motorcycle detection)
- Motion detection
- Text overlay
- Privacy mask
- 20 languages supported
- ONVIF (Profile G, S, T, M) conformant

Introduction

GV-GEBF2802 is a 2 MP eyeball dome IP camera, equipped with smart warm LED for full color surveillance during nighttime. The camera supports H.265 video codec to achieve a better compression ratio while maintaining high-quality pictures at reduced network bandwidth. GV-GEBF2802 adheres to IP67 and IK10 standards and can be powered through PoE.
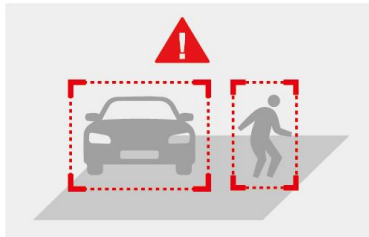
Empowered by deep learning algorithms, AI technology distinguishes humans and vehicles from other moving objects. Integrated with GeoVision Video Management Software (GV-VMS), it supports AI perimeter protection, real-time alert, playback, and more.

Models

Model	Iris	Focal Length (mm)	Horizontal FOV	Maximum Aperture	Image Format
GV-GEBF2802-2F	Fixed	2.8 mm	107°	F/1.6	1/2.8”
GV-GEBF2802-3F		3.6 mm	89°		

Deep Learning Function

AI Perimeter Protection
(Line Crossing, Region Intrusion)

Specifications

Camera				
Image Sensor		1/2.8" progressive scan CMOS		
Picture Elements		1920 (H) x 1080 (V)		
Minimum Illumination	Color	0.008 Lux (F1.6, AGC ON)		
	IR On	0 Lux		
Shutter Speed		Auto / Manual (1/3 ~ 1/100000 sec)		
White Balance		Auto / Manual		
Gain Control		Auto / Manual		
S/N Ratio		50 dB		
WDR Pro		Yes		
Dynamic Range		120 dB		

Lens		GV-GEBF2802-2F	GV-GEBF2802-3F	
Megapixel		2 MP		
Day / Night		Yes (with removable IR-cut filter)		
Lens Type		Fixed		
Focal Length		2.8 mm	3.6 mm	
Maximum Aperture		F/1.6		
Mount		M12		
FOV	Horizontal	107°	89°	
	Vertical	56°	47.5°	
	Diagonal	126°	104°	
Operation	Focus	Fixed		
	Zoom	Fixed		
	Iris	Fixed		
IR LED	Quantity	1 IR LED		
	Max. IR Distance	30 m (100 ft)		
Smart Illumination	LED Quantity	1 Warm LED		
	Max. LED Distance	30 m (100 ft)		

DORI		Detect	Observe	Recognize	Identify
Lens	2.8 mm	41 m (134.5 ft)	16 m (52.4 ft)	8 m (26.2 ft)	4 m (13.1 ft)
	3.6 mm	50 m (164.0 ft)	20 m (65.6 ft)	10 m (32.8 ft)	5 m (16.4 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	1920 x 1080 (Default), 1280 x 720
	Sub Stream	704 x 480, 704 x 576, 640 x 480, 640 x 360 (Default), 352 x 240, 352 x 288
	Third Stream	704 x 480 (Default), 704 x 576, 480 x 240, 352 x 240, 352 x 288
Frame Rate		Max. 30 fps (60 Hz) at 1920 x 1080 / 1280 x 720 / 704 x 480 / 640 x 480 / 352 x 240
		Max. 25 fps (50 Hz) at 1920 x 1080 / 1280 x 720 / 704 x 576 / 640 x 480 / 352 x 288
		* The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).

Maximum Throughput	36 Mbps
Maximum Streams * When the total bitrate is within the maximum throughput	6
Video Analytics	Motion Detection, Video Exception Detection (Abnormal Color Detection, Scene Change, Video Blur), Object Abandoned/Missing Detection
Smart Alarm	Cable Disconnection, IP Address Conflict, SD Card Error, SD Card Full
Image Setting	Brightness, Contrast, Hue, Saturation, Sharpness, 3D Noise Reduction, BLC, Antiflicker, White Balance, Shutter, Gain, Image Orientation (Flip, Mirror, 0°, 90°, 180°, 270° – including Corridor format)
Audio Compression	G.711
Audio Support	One-way audio

Deep Learning Function	
AI Analytics	Line Crossing, Region Intrusion *The two functions can only be enabled one at a time.

Network	
Interface	10/100 Ethernet
Protocol	802.1x, DDNS, DHCP, FTP, HTTP POST, 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	
	Ethernet	RJ-45 connector	
	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	No
		* Choose either the built-in or external microphone.	
		* The Audio In port only supports microphones with a power supply.	
	Local Storage	microSD card slot (SD / SDHC / SDXC), up to 256 GB	

General	
Operating Temperature	-30°C ~ 60°C (-22°F ~ 140°F)
Humidity	0 ~ 95% (no condensation)
Power Source	DC 12V, 1A / PoE (IEEE 802.3af)
Max. Power Consumption	6 W
Dimensions	Ø 94.6 x 82.8 mm (Ø 3.7 x 3.3 in)
Weight	0.45 kg (0.99 lb)
Ingress Protection	IP67
Vandal Resistance	IK10 for metal casing
Certification	CE, FCC, LVD, RoHS, UKCA compliant

Web Interface	
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, Digital Zoom, Text Overlay, Image Masking, Intelligent Mark
Language	Chinese Traditional, Czech, Dutch, English, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Spanish (Latin America), Turkish, Ukrainian

Software Applications	
Software Supported	GV-VMS (V17.4.8 / V18.3.5 or later, patch files required / V20.0.1 or later), GV-Edge Recording Manager (V2.3.1 or later), GV-Control Center (V4.2.1 or later, patch files required), GV-Recording Server (V2.1.1 or later, patch files required), GV-IP Device Utility (V9.0.5 or later)
Smart Device Access	GV-Eye for iOS and Android (V3.5.0 or later)
Live Viewing	Web Browser (Edge, IE mode in Edge, Chrome, Firefox, Safari), Mobile App

Note: All specifications are subject to change without notice.
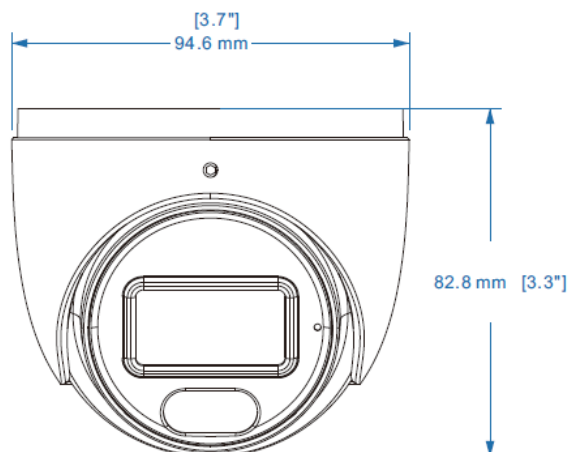
Packing List

1. GV-GEBF2802 Eyeball Dome
2. Waterproof Rubber Set
3. Screw Kit
4. Drill Template Paster
5. Download Guide

Accessories

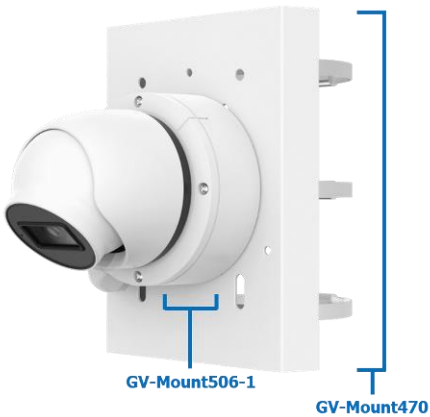| Model No.	Name		Details
GV-Mount211-4	Wall Mount Bracket		Dimensions: 129.5 x 155 x 74.5 mm (5.10 x 6.10 x 2.93 in) Weight: 0.53 kg (1.16 lb)
GV-Mount211-8 (must be used with GV-Mount506-1)	Wall Mount Bracket		Dimensions: 188.4 x 121 x 137.3 mm (7.41 x 4.76 x 5.4 in) Weight: 0.52 kg (1.15 lb)
GV-Mount314 (must be used with GV-Mount211-8 or GV-Mount506-1)	Corner Mount Bracket		Dimensions: 215 x 121.4 x 215 mm (8.46 x 4.78 x 8.46 in) Weight: 2.05 kg (4.52 lb)
GV-Mount470 (must be used with GV-Mount211-8 or GV-Mount506-1)	Pole Mount Bracket		Dimensions: 163.3 x 54.5 x 215 mm (6.43 x 2.15 x 8.46 in) Weight: 1.10 kg (2.43 lb)
GV-Mount506-1	Junction Box		Dimensions: 117.9 x 143.3 x 47 mm (4.64 x 5.64 x 1.85 in) Weight: 0.38 kg (0.84 lb)
GV-Mount507	Junction Box		Dimensions: Ø 96 x 38.8 mm (Ø 3.78 x 1.53 in) Weight: 0.135 kg (0.30 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.

Dimensions

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	Wall Bracket Mount	Pole Bracket Mount
GV-Mount506-1	GV-Mount211-8	GV-Mount470

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