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.

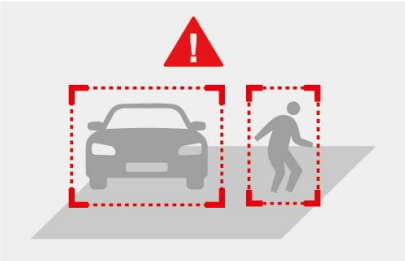
Deep Learning Function

Face Detection

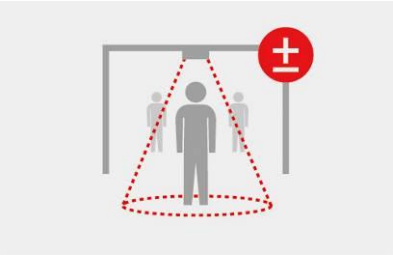


AI Perimeter Protection

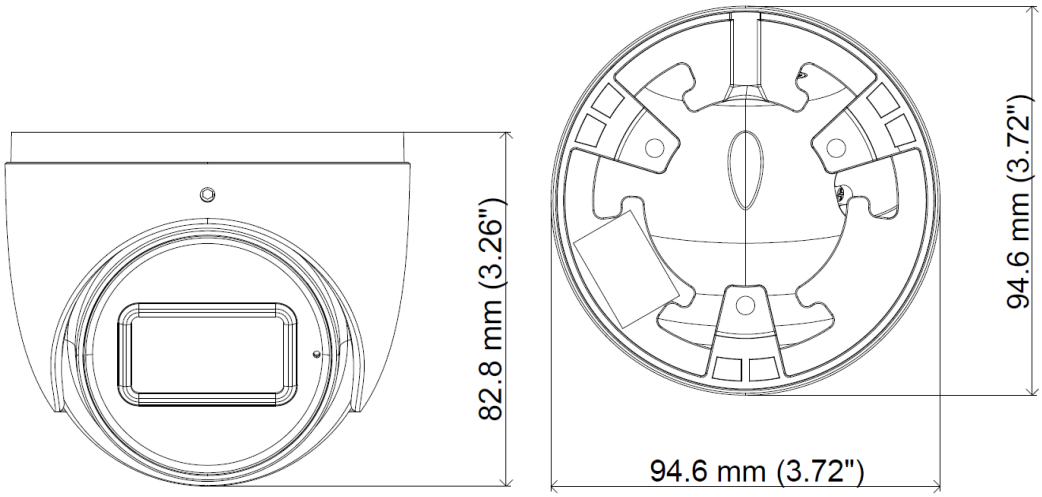
(Region Intrusion, Line Crossing, Region Entrance, Region Exiting)



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 × 240			
	Third Stream	1280 x 720 (Default), 704 x 576, 704 x 480, 480 x 240, 352 × 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) 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) *The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).			
Maximum Throughput		64 Mbps			
Maximum Streams *When the total bitrate is within the maximum throughput		8 *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 Smart Event: - Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Target Counting, Heat Map, Video Metadata: Human & Vehicle classification - Loitering Detection, Illegal Parking Detection *Face events and smart events cannot be enabled at the same time. *A maximum of 2 smart detection functions are suggested at a time to ensure comprehensive detection results and the optimized performance by the camera. *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. * The Audio In port only supports microphones with a power supply.
	Local Storage	microSD card slot (SD / SDHC / SDXC), up to 256 GB
General		
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
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, 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
Software Applications		
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

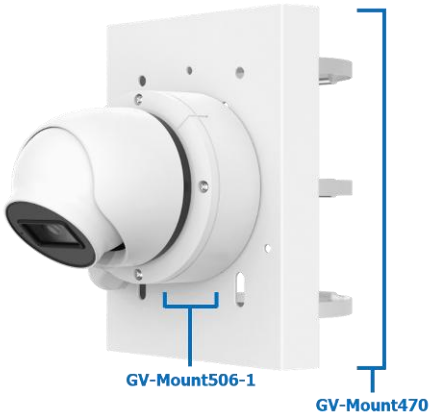
1. GV-GEB4900 Eyeball Dome
2. Waterproof Rubber Set
3. Screw kit
4. Drill Template Paster
5. Download Guide

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 + GV-Mount506-1, or GV-Mount506-1)	Corner Mount Bracket		Dimensions: 215x121.4x215mm (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 + GV-Mount506-1, 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-Mount927 (for standard US single and double gang boxes only)	Power Box Mount Bracket		Dimensions: Ø 145 x 11.2 mm (Ø 5.71 x 0.44 in) 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.

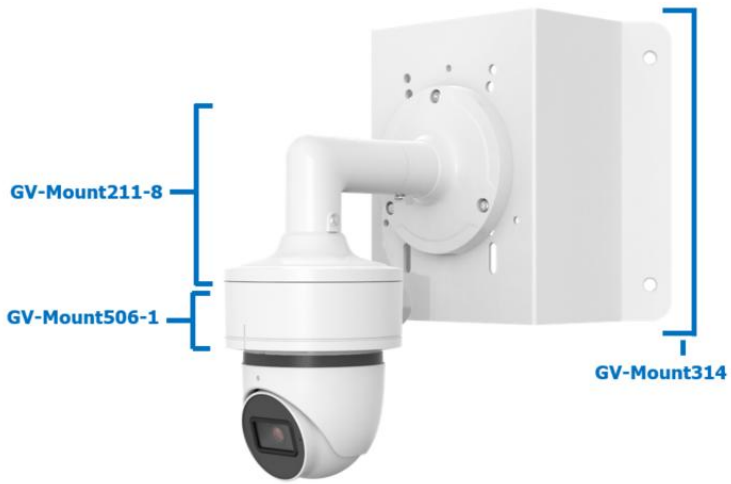
Mounting Type

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

