GV-GVD4910 Cloud AI 4MP H.265 4.3x Zoom Super Low Lux WDR Pro IR Vandal Proof IP Dome

- Direct-to-Cloud
- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/3” progressive scan CMOS
- Min. illumination at 0.003 lux
- Triple streams from H.265, H.264 and MJPEG
- Up to 30 fps at 2688 x 1520
- Intelligent IR
- IR distance up to 50 m (165 ft)
- Day and Night function (with removable IR-cut filter)
- Ingress protection (IP67)
- Vandal resistance (IK10 for metal casing)
- 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
- 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-GVD4910 is an outdoor vandal proof IP dome 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 bandwidth. GV-GVD4910 adheres to IP67 and IK10 standards, and can be powered through PoE.

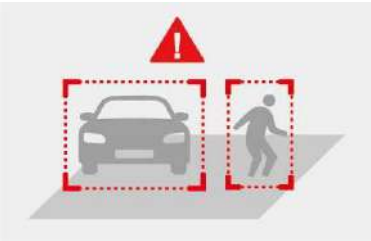
Empowered by deep learning algorithms, its AI technology distinguishes humans and vehicles from other moving objects. When integrated with GeoVision Video Management Software (VMS), it supports AI perimeter protection, real-time alert, event playback, and more. By connecting the camera to the cloud-based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

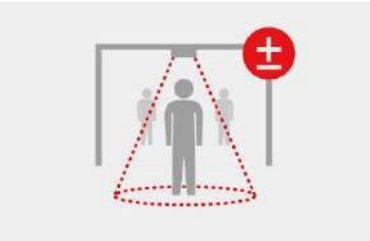
Face Detection

AI Perimeter Protection

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



People Counting



Specifications

Camera					
Image Sensor		1/3” progressive scan CMOS			
Picture Elements		2688 (H) x 1520 (V)			
Minimum Illumination	Color	0.003 Lux (F1.3, 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 Pro		Yes			
Dynamic Range		120 dB			
Lens					
Megapixel		4 MP			
Day/Night		Yes (with removable IR-cut filter)			
Focal Length		2.8-12 mm			
Lens Type		Motorized			
Maximum Aperture		F/1.3			
Mount		Ø14			
FOV	Horizontal	100°~28.9°			
	Vertical	54.5°~16.7°			
	Diagonal	118°~35°			
Operation	Focus	Auto / Manual			
	Zoom	4.3x			
	Iris	DC			
IR LED Quantity		3 IR LEDs			
Max. IR Distance		50 m (165 ft)			
DORI		**Detect**	**Observe**	**Recognize**	**Identify**
Lens	2.8-12 mm (W)	58.9 m (193.2 ft)	23.5 m (77.0 ft)	11.7 m (38.3 ft)	5.8 m (19.0 ft)
	2.8-12 mm (T)	205.9 m (675.5 ft)	82.4 m (270.3 ft)	41.2 m (135.1 ft)	20.6 m (67.5 ft)
Operation					
Video Compression		H.265, H.265+, H.264, H.264+, MJPEG			
Video Streaming		Triple streams			
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 288, 352 × 240			
	Third Stream	1280 x 720 (Default), 704 x 576, 704 x 480, 480 x 240, 352 x 288, 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		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)	
Digital I/O	Input	1 Input, dry contact, NO / NC	
	Output	1 Relay Output (1A 30V DC / 0.3A 125V AC)	
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 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 ~ 345°	
	Tilt	0 ~ 77°	
	Rotate	0 ~ 345°	
Connectors	Power	DC jack (DC 12V, 1.25A), PoE	
	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.	
	Video Output	CVBS output (BNC connector x 1)	
	Digital I/O	4-pin terminal block pitch 3.5 mm (0.14”)	
	Local Storage	microSD card slot (SD / SDHC / SDXC), up to 256 GB	
General			
Operating Temperature		-30 ~ 60°C (-22 ~ 140°F)	
Humidity		0 ~ 95% (no condensation)	
Power Source		12V DC / PoE (IEEE 802.3af)	
Max. Power Consumption		9 W	
Dimensions		Ø 141 x 100.2 mm (Ø 5.55 x 3.94 in)	
Weight		0.93 kg (2.05 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, 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 (V1.1.0 or later), GV-IP Device Utility (V9.0.0 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 Camera 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

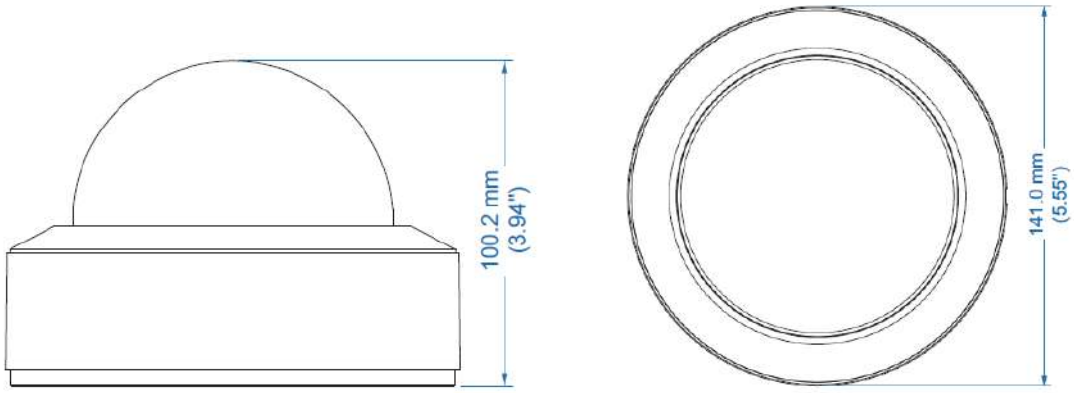
1. GV-GVD4910 Vandal Proof Dome
2. Rubber Plug
3. Screw Kit
4. CVBS & DC IN Cables
5. Drill Template Paster
6. Hex Key
7. Download Guide

Accessories

Model No.	Name		Details
GV-Mount118 (must be used with GV-Mount510)	Pendant Mount		Dimensions: Ø 139.3 x 194.9 mm (Ø 5.48 x 7.67 in) Weight: 0.44 kg (0.97 lb)
GV-Mount211-6 (must be used with GV-Mount510)	Wall Mount Bracket		Dimensions: 199 x 139.3 x 140.6 mm (7.83 x 5.48 x 5.54 in) Weight: 0.56 kg (1.23 lb)
GV-Mount211-13	Wall Mount Bracket		Dimensions: 266 x 174.1 x 142.5 mm (10.47 x 6.85 x 5.61 in) Weight: 1.14 kg (2.51 lb)

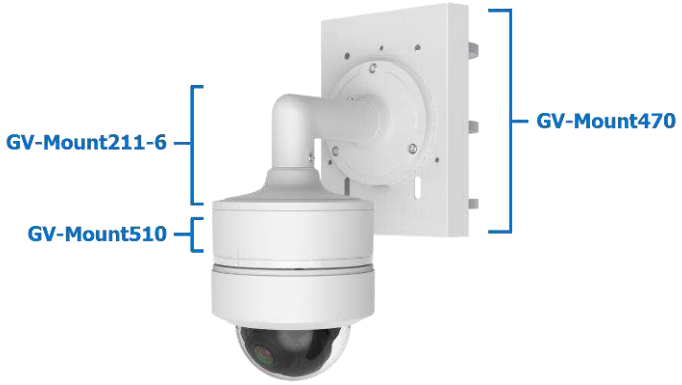
GV-Mount314 (must be used with GV-Mount211-6 + GV-Mount510, or GV-Mount211-13)	Corner Mount Bracket		Dimensions: 215 x 121.4 x 215 mm (8.46 x 4.78 x 8.46 in) Weight: 2.05 kg (4.52 lb)
GV-Mount470 (must be used with GV-Mount211-6 + GV-Mount510, or GV-Mount211-13)	Pole Mount Bracket		Dimensions: 163.3 x 54.5 x 215 mm (6.43 x 2.15 x 8.46 in) Weight: 1.10 kg (2.43 lb)
GV-Mount510	Junction Box		Dimensions: 139.3 x 171.6 x 42 mm (5.48 x 6.76 x 1.65 in) Weight: 0.36 kg (0.79 lb)
GV-Mount707 (must be used with GV-Mount118)	Extension Tube		Dimensions: Ø 37 x 515 mm (Ø 1.46 x 20.28 in) Weight: 0.8 kg (1.76 lb)
GV-Mount925	In-Ceiling Mounting Bracket		Dimensions: Ø 233 x 80.5 mm (Ø 9.17 x 3.17 in) Weight: 0.704 kg (1.55 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.

Dimensions



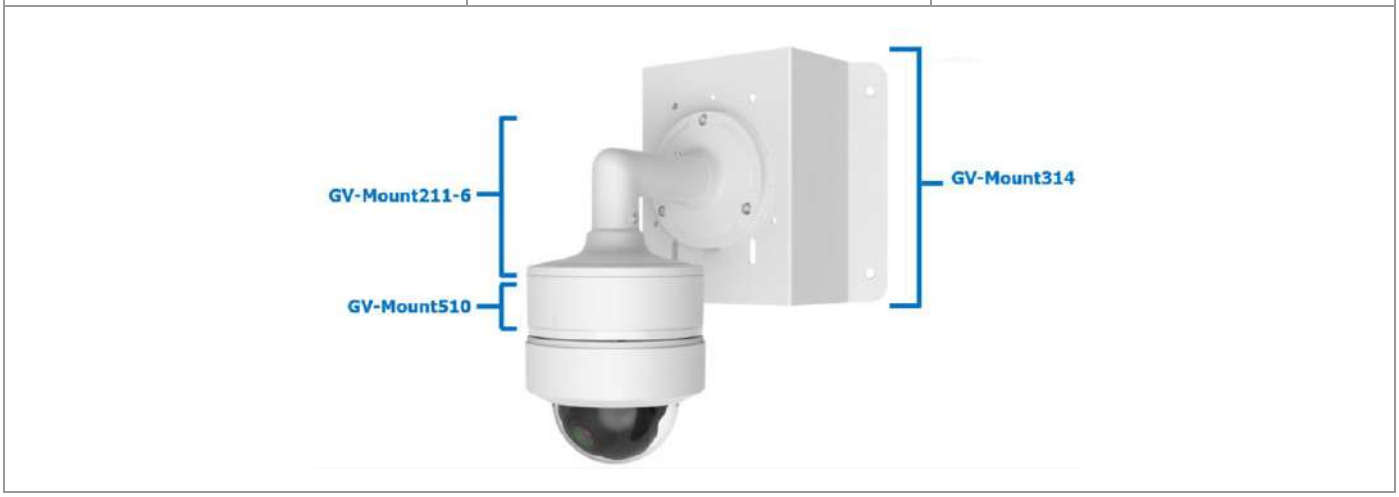
Mounting Type

Junction Box Mount	Junction Box Mount	Wall Bracket Mount
GV-Mount510	GV-Mount510	GV-Mount211-6

In-Ceiling Mount	Junction Box Mount	Wall Bracket Mount	Pole Bracket Mount
GV-Mount925	GV-Mount510	GV-Mount211-6	GV-Mount470
			

Wall Bracket Mount	Wall Bracket Mount	Pole Bracket Mount
GV-Mount211-13	GV-Mount211-13	GV-Mount470

Junction Box Mount	Wall Bracket Mount	Corner Bracket Mount
GV-Mount510	GV-Mount211-6	GV-Mount314



Wall Bracket Mount	Corner Bracket Mount	Junction Box Mount	Pendant Mount
GV-Mount211-13	GV-Mount314	GV-Mount510	GV-Mount118