GV-GDR4900 Cloud AI 4MP H.265 Super Low Lux WDR Pro IR Mini

Fixed Rugged IP Dome

- Direct-to-Cloud
- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/3" progressive scan CMOS
- Min. illumination at 0.005 lux
- Triple streams from H.265, H.264 and MJPEG
- Up to 30 fps at 2592 x 1520
- Intelligent IR
- IR distance up to 20 m (65 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 micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10) 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-GDR4900 is an outdoor camera designed with IK10 vandal resistance and IP67 ingress protection. The camera supports H.265 video codec to achieve 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, AI technology distinguishes human 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.
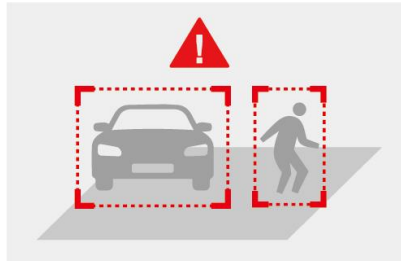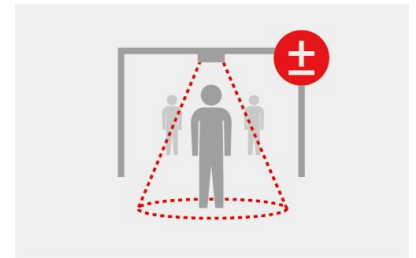
Deep Learning Function
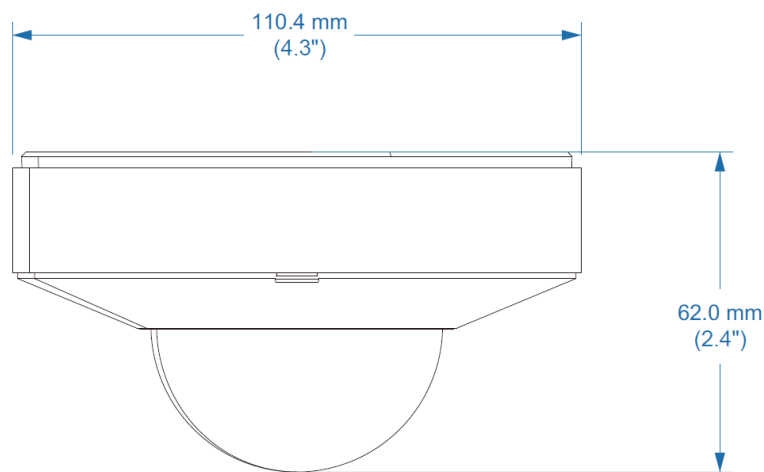
Face Detection	AI Perimeter Protection	People Counting
	(Region Intrusion, Line Crossing, Region Entrance, Region Exiting)	

Dimensions

110.4 mm
(4.3")

62.0 mm
(2.4")

Specifications

Camera		
Image Sensor		1/3" progressive scan CMOS
Picture Elements		2592(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 Pro		Yes
Dynamic Range		120 dB
Lens		
Megapixel		4 MP
Day/Night		Yes (with removable IR-cut filter)
Focal Length		2.8 mm
Lens Type		Fixed
Maximum Aperture		F/1.6
Mount		M12
Horizontal FOV		95.3°

Operation	Focus	Fixed			
	Zoom	Fixed			
	Iris	Fixed			
IR LED Quantity		2 IR LEDs			
Max. IR Distance		20 m (65 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
Video Resolution	Main Stream	2592 x 1520 (Default), 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 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 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).
Video Analytics		Motion Detection, Object Abandoned/Missing Detection
Smart Alarm		Motion Detection, SD Card Error, SD Card Full, IP Address Conflict, Cable Disconnected, Scene Change Detection, Video Blur Detection, Video Cast Detection, Audio Exception
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
		*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.

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 ~ 350°
Connectors	Power	DC Jack (DC 12 V, 1 A) / PoE (IEEE 802.3af)
	Ethernet	RJ-45
	Audio	1 In (built-in microphone, external speaker required with power supply), 1 Out (stereo phone jack, 3.5 mm / 0.14")
	Digital I/O	4-pin terminal block pitch 3.5 mm (0.14")
	Local Storage	Micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10) *UHS-II card type is not supported.

General

Operating Temperature		-30 ~ 60°C (-22 ~ 140°F)
Humidity		0 ~ 95% (no condensation)

Power Source	DC 12 V / PoE (IEEE802.3af)
Max. Power Consumption	5.5 W
Dimensions	Ø 110.4 x 62 mm (Ø 4.3 x 2.4")
Weight	0.42 kg (0.93 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 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	Hungarian, English, Spanish, Spanish (LA), Italian, Portuguese, Russian, Polish, Romanian, Hebrew, German, French, Dutch, Norwegian, Czech, Turkish, Japanese, Korean, Chinese Traditional
Software Applications	
Software Supported	GV-VMS (V17.4.6 / V18.3.2 or later), GV-Edge Recording Manager (V2.2.5 or later), GV-Control Center (V4.1.0 or later), GV-Recording Server (V2.3.0, coming soon)
Smart Device Access	GV-Eye for iOS and Android (V3.1.1 or later)
Live Viewing	Web Browser (IE, Edge, Chrome, Firefox, Safari), Mobile APP

Note:
1. When connecting to GV-Cloud VMS, avoid connecting to other GV-Software at the same time.
2. Industrial-grade microSD cards are recommended to avoid event recordings writing failure.
3. All specifications are subject to change without notice.

Packing List

1.	GV-GDR4900 Mini Dome	4.	Drill Template Paster
2.	Waterproof Rubber Set	5.	Hex Key
3.	Screw Kit	6.	Download Guide

Accessories

Model No.	Name		Details
GV-Mount211-4	Wall Mount Bracket		Dimensions: 129.8 x 154.9 x 74.4 mm (5.11" x 6.1" x 2.93") Weight: 0.527 kg (1.16 lb)
GV-Mount211-9 (must be used with GV-Mount509)	Wall Mount Bracket		Dimensions: 148 x 121 mm (5.83" x 4.76") Weight: 0.350 kg (0.77 lb)
GV-Mount509	Junction Box		Dimensions: 112 x 40 mm (4.72" x 1.57") Weight: 0.231 kg (0.51 lb)
GV-PA191	Power over Ethernet (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.