

# GV-TVD4810 AI 4MP H.265 5x Zoom Super Low Lux WDR Pro IR Vandal Proof

## IP Dome



- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/3" progressive scan super low lux CMOS
- Min. illumination at 0.002 lux
- Triple streams from H.265, H.264 and MJPEG
- Wide Dynamic Range Pro (WDR Pro)
- Up to 30 fps at 2688 x 1520
- Motorized lens for remote focus / zoom adjustment
- Intelligent IR
- IR distance up to 40 m (130 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)
- Built-in microSD card slot (SD / SDHC / SDXC / UHS-I, Class 10) for local storage
- Built-in microphone
- Two-way audio capable
- DC 12V / PoE (IEEE 802.3af)
- ONVIF (Profile G, S, T, M) conformant

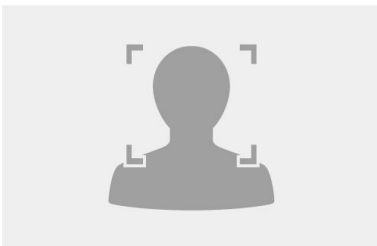
## Introduction

GV-TVD4810 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 alerts, event playback, and more.

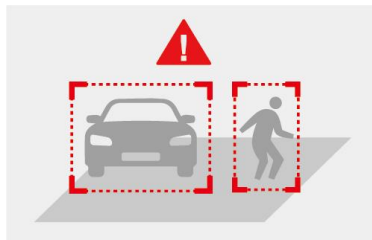
## Deep Learning Function

### Face Detection

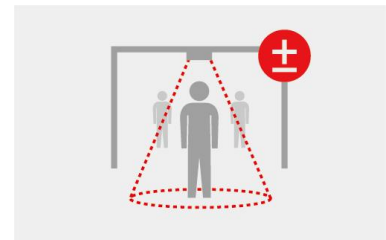


### AI Perimeter Protection

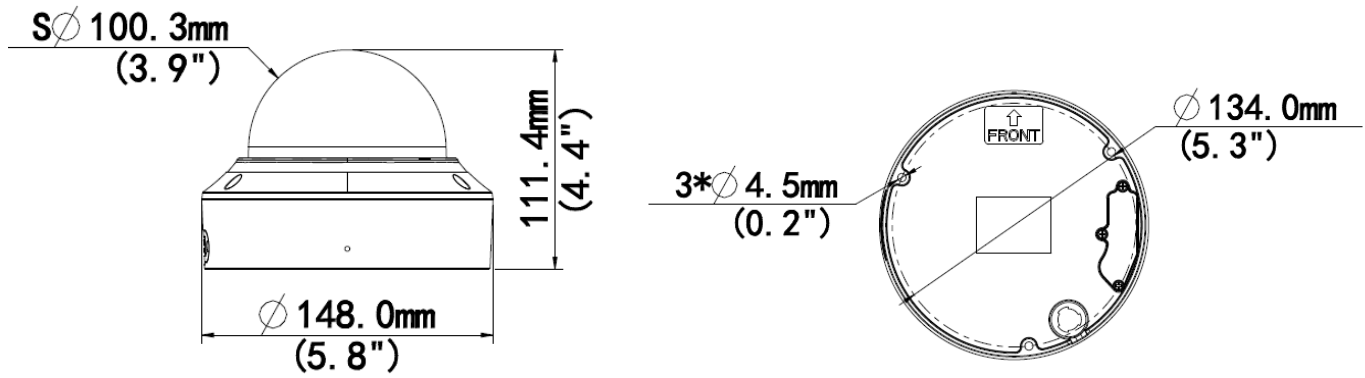
(Intrusion, Crossing Line  
Entering Area, Leaving Area)



### People Flow Counting



## Dimensions



## Specifications

Camera					
Image Sensor		1/3" progressive scan super low lux CMOS			
Picture Elements		2688(H) x 1520 (V)			
Minimum Illumination	Color	0.002 Lux (F1.2, AGC ON)			
	IR On	0 Lux			
Shutter Speed		Automatic, Manual 1 ~ 1/100000 sec)			
White Balance		Automatic, Manual			
Gain Control		Automatic, Manual			
S/N Ratio		56 dB			
WDR Pro		Yes			
Dynamic Range		120 dB			
Lens					
Megapixel		4 MP			
Day/Night		Yes (with removable IR-cut filter)			
Focal Length		2.7 ~ 13.5mm			
Lens Type		Motorized varifocal lens			
Maximum Aperture		F/1.2			
Mount		Ø14 mm			
FOV	Horizontal	98° ~ 31°			
	Vertical	54.76° ~ 18.55°			
	Diagonal	127.74° ~ 36.99°			
Operation	Focus	Automatic / Manual			
	Zoom	5x Optical Zoom			
	Iris	Fixed			
IR LED Quantity		2 IR LEDs			
Max. IR Distance		40 m (130 ft)			
DORI					
		Detect	Observe	Recognize	Identify
Lens	2.7 mm	60.8 m (199.5 ft)	24.3 m (79.7 ft)	12.2 m (40 ft)	6.1 m (20 ft)
	13.5 mm	303.8 m (996.7 ft)	121.5 m (398.6 ft)	60.8 m (199.5 ft)	30.4 m (99.7 ft)
Operation					
Video Compression		H.265, H.264, MJPEG			
Video Streaming		Triple streams			
Frame Rate		30 fps at 2688 x 1520, 30 fps at 2560 x 1440, 30 fps at 2304 x 1296 (60 / 50 Hz) * The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).			
Maximum Throughput		40 Mbps			
Maximum Streams *When the total bitrate is within the maximum throughput		20			

Video Analytics	Motion Detection, Tampering Alarm, Audio Detection *Tampering alarm and audio detection are only accessible through the camera's Web interface, which can be used to trigger alerts such as e-mail and FTP	
Image Setting	Brightness, Contrast, Saturation, Sharpness, Flicker-less, 3D Noise Reduction, Image Orientation (Flip, Mirror, 0°, 90°, 180°, 270°-including Corridor format)	
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)
<b>Deep Learning Function</b>		
AI Analytics	<ul style="list-style-type: none"> <li>- <u>Perimeter Protection</u> (Human &amp; Vehicle classification): Cross Line, Enter Area, Leave Area, Intrusion</li> <li>- <u>Face Detection</u>, <u>People Flow Counting</u>, <u>Crowd Density Monitoring</u></li> </ul> <p>*All Perimeter Protection rules can be enabled together. However, due to hardware resource limitations, only one AI function can be enabled at a time: Perimeter Protection, Face Detection, People Flow Counting, or Crowd Density Monitoring.</p>	
<b>Video Resolution</b>		
Main Stream	2688 x 1520 (Default), 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720	
Sub Stream	1280 x 720, 720 x 576, 640 x 360 (Default), 640 x 480	
Third Stream (Closed by Default)	640 x 360, 352 x 288	
<b>Network</b>		
Interface	10/100 Ethernet	
Protocol	802.1X (including EAP-TLS), ARP, DHCP, DDNS, DNS, DynDNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, QoS, RTCP, RTP, RTSP, SMTP, SNMP, TCP, UDP, UPnP, ONVIF (Profile G, S, T, M)	
<b>Mechanical</b>		
Camera Angle Adjustment	Pan	0 ~ 355°
	Tilt	0 ~ 80°
	Rotate	0 ~ 355°
Connectors	Power	DC Jack (DC 12 V, 1.25 A), PoE
	Ethernet	RJ-45
	Audio	1 In (built-in or external microphone with power supply); 1 Out (Audio Out Wire)
	Digital I/O	4-pin terminal block pitch 3.5 mm (0.14")
	Local Storage	microSD card slot (SD / SDHC / SDXC), up to 512 GB
<b>General</b>		
Operating Temperature	-30 ~ 60°C (-22 ~ 140°F)	
Humidity	0 ~ 95% (no condensation)	
Power Source	12 V DC / PoE (IEEE802.3af)	
Max. Power Consumption	7.0 W	
Dimensions	Ø 148 x 111 mm (Ø 5.8 x 4.4")	
Weight	0.92 kg (2.03 lb)	
Ingress Protection	IP67	
Vandal Resistance	IK10 for metal casing	
Certification	CE, FCC, RoHS, 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, Video Recording, Change Video Quality, Bandwidth Control, Image Snapshot, Text Overlay, Image Masking	
Language	Chinese Traditional, Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish	
<b>Applications</b>		
Software Supported	GV-VMS (V17.4.2 / V18.2.1), GV-DVR / NVR (V8.9.1), GV-Control Center (V3.8.0), GV-Recording Server / Video Gateway (V2.0.0), GV-Edge Recording Manager Win version (V2.0.0), GV-Redundant / Failover Server (V1.2.0), GV-Mobile Server (V1.5.1)	
Smart Device Access	GV-Eye for iOS and Android	
Live Viewing	Browser (IE, Edge, Chrome, Firefox), Mobile App	










**Note:**





1. Patch files are required for some supported software.
2. Do not use clothes or any ordinary material to clean the camera cover since they may result in scratches.
3. Specifications are subject to change without notice.

**Packing List**

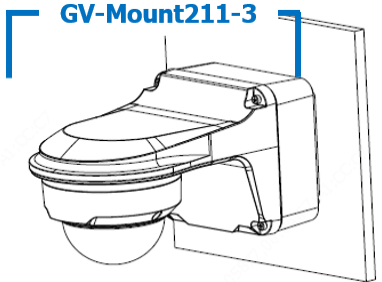
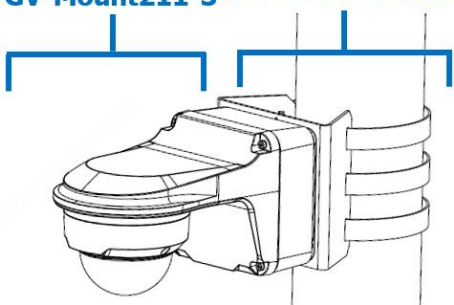


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|--------------------------|--------------------------|
| 1. GV-TVD4810 Dome       | 4. Drill Template Paster |
| 2. Waterproof Rubber Set | 5. Torx Wrench           |
| 3. Screw Kit             | 6. Download Guide        |

**Accessories**

Model No.	Name		Details
GV-Mount107 (must be used with GV-Mount 212-2)	Pendant Bracket		Dimensions: $\varnothing$ 120 x 334 mm ( $\varnothing$ 4.72" x 13.15") Weight: 0.74 kg (1.63 lb)
GV-Mount211-2	Wall Mount and Junction Box		Dimensions: $\varnothing$ 253 x 125 x 125 mm ( $\varnothing$ 10 x 4.9 x 4.9") Weight: 1 kg (2.2 lb)
GV-Mount211-3	Wall Mount and Junction Box		Dimensions: 254.5 x 124.9 x 128 mm (10.0" x 4.9" x 5.0") Weight: 0.86 kg (1.90 lb)
GV-Mount212-2	Wall Box Mount		Dimensions: $\varnothing$ 126 x 36 mm ( $\varnothing$ 5.0 x 1.4") Weight: 0.22 kg (0.48 lb)
GV-Mount300-2	Convex Corner Mount		Dimensions: 137 x 233 x 160 mm (5.4" x 9.17" x 6.3") Weight: 1.65 kg (3.64 lb)
GV-Mount310-2	Concave Corner Mount		Dimensions: 111.2 x 369.9 x 210 mm (2.6" x 11.4" x 6.6") Weight: 1.65 kg (3.64 lb)
GV-Mount420 (must be used with GV-Mount211-2)	Pole Mount Bracket		Dimensions: $\varnothing$ 120 x 120 x 53.4 mm ( $\varnothing$ 4.7 x 4.7 x 2.1") Steel Strap Diameter: $\varnothing$ 67 ~ 127 mm ( $\varnothing$ 2.6" ~ 5") Weight: 0.45 kg (0.99 lb)
GV-Mount440-1 (must be used with GV-Mount211-2 or GV-Mount211-3)	Pole Mount Bracket		Dimensions: 136 x 127 x 63.6 mm (5.4" x 5.0" x 2.5") Weight: 0.34 kg (0.75 lb) Steel Strap Diameter: $\varnothing$ 67 ~ 127 mm ( $\varnothing$ 2.6" ~ 5")
GV-Mount606	In-Ceiling Mount		Dimensions: $\varnothing$ 235 x 63 mm ( $\varnothing$ 9.3" x 2.5") In-ceiling hole: $\varnothing$ 195 mm ( $\varnothing$ 7.67") Weight: 0.49 kg (1.1 lb)

<p>GV-Mount704 (must be used with GV-Mount107)</p>	<p>Extension Tube</p>		<p>Dimensions: Ø 3.5 x 10 or 20 or 30 or 50 cm (Ø 1.38 x 3.9 or 7.9 or 11.8 or 19.7") Weight: 225g or 360g or 500g or 780g (0.5 lb or 0.79 lb or 1.1 lb or 1.72 lb)</p>
<p>GV-Mount921 (for standard US single and double gang boxes only)</p>	<p>Power Box Mount Bracket</p>		<p>Dimensions: Ø 145 x 13 mm (Ø 5.7" x 0.5") Weight: 0.13 kg (0.29 lb)</p>
<p>GV-PA191</p>	<p>PoE Adapter</p>		<p>GV-PA191 is a Power over Ethernet (PoE) adapter designed to provide power to the IP device through a single Ethernet cable.</p>
<p>GV-PA301</p>	<p>Gigabit PoE Adapter</p>		<p>GV-PA301 is a Gigabit Power over Ethernet (PoE) adapter.</p>
<p>GV-POE Switch</p>		<p>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.</p>	
<p>Power Adapter</p>		<p>Contact our sales representatives for the countries and areas supported.</p>	

**Mounting Type**

<p><b>Wall Mount with Junction Box</b> GV-Mount211-3</p> 	<p><b>Pole Mount</b> GV-Mount211-3 + GV-Mount440-1</p> 
<p><b>Convex Corner Mount</b> GV-Mount300-2</p> 	<p><b>Concave Corner Mount</b> GV-Mount310-2</p> 

Convex / Concave Corner Mount	Convex / Concave Corner Mount
GV-Mount211-2 / 211-3 + GV-Mount300-2 / 310-2	GV-Mount212-2 + GV-Mount300-2 / 310-2
