

# GV-TVD8810 AI 8MP H.265 4.3x Zoom Super Low Lux WDR Pro IR Vandal Proof

## **IP Dome**





- Al Deep learning: Al Perimeter Protection & Classification (Human, Vehicle)
- 1/2.8" progressive scan low lux CMOS sensor
- Triple streams from H.265, H.264 or MJPEG
- Wide Dynamic Range Pro (WDR Pro)
- Min. illumination at 0.003 lux
- Up to 20 fps at 3840 x 2160
- Intelligent IR
- Day and night function (with removable IR-cut filter)
- Motorized varifocal lens for remote focus / zoom adjustment
- IR distance up to 40 m (130 ft)
- Vandal Resistance (IK10 for metal casing)
- Ingress protection (IP67)
- Built-in micro SD 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

The Dome IP Camera 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 better compression ratio while maintaining high quality pictures at reduced network bandwidths. GV-TVD8810 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.

#### **Deep Learning Function**

**Face Detection** 



Al Perimeter Protection (Intrusion, Crossing Line Entering Area, Leaving Area)

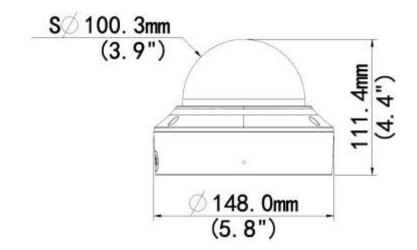


**People Flow Counting** 





### **Dimensions**



# **Specifications**

| Camera                  |                                     |   |                                    |                   |                   |  |
|-------------------------|-------------------------------------|---|------------------------------------|-------------------|-------------------|--|
| Image Sensor            |                                     | 1/2.8" progressive scan low lux CMOS  |                                    |                   |                   |  |
| Picture Elements        |                                     | 3840 (H) x 2160 (V)   |                                    |                   |                   |  |
| Minimum<br>Illumination | Color                               | 0.003 Lux (F1.6, AGC ON)  |                                    |                   |                   |  |
|                         | IR On                               | 0 Lux   |                                    |                   |                   |  |
| Shutter Speed           |                                     | Auto / Manual (1 ~ 1/100000 sec)  |                                    |                   |                   |  |
| White Balance           | -                                   |   | Auto / Manual                      |                   |                   |  |
| Gain Control            |                                     | Auto / Manual   |                                    |                   |                   |  |
| S/N Ratio               |                                     | 56 dB   |                                    |                   |                   |  |
| WDR Pro                 |                                     | Yes   |                                    |                   |                   |  |
| Dynamic Range           |                                     | Up to 120 dB  |                                    |                   |                   |  |
| Lens                    |                                     |   |                                    |                   |                   |  |
| Megapixel               |                                     |   | 8 MP                               |                   |                   |  |
| Day / Night             |                                     |   | Yes (with removable IR-cut filter) |                   |                   |  |
| Lens Type               |                                     | Motorized varifocal lens  |                                    |                   |                   |  |
| Focal Length            |                                     | 2.8 ~ 12 mm   |                                    |                   |                   |  |
| Maximum Aperture        |                                     | F/1.6   |                                    |                   |                   |  |
| Mount                   |                                     | Ø14 mm  |                                    |                   |                   |  |
| Horizontal FOV          | Horizontal FOV                      |   | 29.2° ~ 107.4°                     |                   |                   |  |
|                         | Focus                               | Auto / Manual   |                                    |                   |                   |  |
| Operation               | Zoom                                | 4.3x Optical Zoom   |                                    |                   |                   |  |
|                         | Iris                                | Fixed   |                                    |                   |                   |  |
| IR LED Quantity         | ,                                   | 2 IR LEDs   |                                    |                   |                   |  |
| Max. IR Distance        | e                                   | 40 m (130 ft)   |                                    |                   |                   |  |
| DORI                    |                                     | Detect  | Observe                            | Recognize         | Identify          |  |
|                         | 2.8 mm                              | 86.9 m (285.1 ft)   | 34.8 m (114.2 ft)                  | 17.4 m (57.1 ft)  | 8.7 m (28.5 ft)   |  |
| Lens                    | 12 mm                               | 372.4 m<br>(1221.8 ft)  | 149 m (488.8 ft)                   | 74.5 m (244.4 ft) | 37.2 m (122.0 ft) |  |
| Operation               |                                     |   |                                    |                   |                   |  |
| Video Compres           | sion                                | H.265, H.264, MJPEG   |                                    |                   |                   |  |
| Video Streaming         |                                     | Triple streams  |                                    |                   |                   |  |
|                         | Main Stream                         | 3840 x 2160 (Default), 3072 x 1728, 2560 x 1440, 1920 x 1080  |                                    |                   |                   |  |
| Video<br>Resolution     | Sub Stream                          | 1920 x 1080, 1280 x 720, 720 x 576, 704 x 288, 640 x 360 (Default), 352 x 288   |                                    |                   |                   |  |
|                         | Third Stream<br>(Closed by Default) | 720 x 576, 704 x 288, 640 x 360, 352 x 288  |                                    |                   |                   |  |
| Frame Rate              |                                     | 20 fps at 3840 x2160, 25 fps at 3072 x 1728 / 2560 x 1440, 30 fps at 1920 x 1080 (60 / 50 Hz)   *The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes). |                                    |                   |                   |  |

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| 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, Image Orientation (Flip, Mirror, 0°, 90°, 180°, 270°-including Corridor format)   |  |  |
| Audio Compress   | sion          | G.711  |  |  |
| Audio Support  |               | Two-way Audio (external speaker required)  |  |  |
| Digital I/O Input Output   |               | 1 Input, dry contact, NO / NC  |  |  |
|  |               | 1 Relay Output (1A 30V DC / 0.3A 125V AC)  |  |  |
| Deep Learning Fu   | nction        |  |  |  |
| Al Analytics   |               | -Intrusion, Crossing Line, Entering Area, Leaving Area: Human & Vehicle classification -Face Detection, People Flow Counting, Crowd Density Monitoring   |  |  |
| Network  |               |  |  |  |
| Interface  |               | 10/100 Ethernet  |  |  |
| Protocol   |               | 802.1x, ARP, DHCP, DDNS, DNS, DynDNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, RTCP, RTP, RTSP, SMTP, SNMP, TCP, UDP, UPnP, ONVIF (Profile G, S, T, M)  |  |  |
| Mechanical   |               |  |  |  |
|  | Pan           | 0 ~ 360°   |  |  |
| Camera Angle   | Tilt          | 0 ~ 68°  |  |  |
| Adjustment   | Rotate        | 0 ~ 360°   |  |  |
|  | Power         | DC Jack, PoE   |  |  |
|  | Ethernet      | RJ-45  |  |  |
| Connectors   | 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 | Micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10)  * UHS-II card type is not supported.  |  |  |
| General  |               |  |  |  |
| Operating Temp   | erature       | -30 ~ 60°C (-22 ~ 140°F)   |  |  |
| Humidity   |               | 0 ~ 95% (no condensation)  |  |  |
| Power Source   |               | 12 V DC / PoE (IEEE802.3af)  |  |  |
| Max. Power Cor   | nsumption     | 5.5 W  |  |  |
| Dimensions   |               | Ø148 x 111 mm (Ø5.8 x 4.4")  |  |  |
| Weight   |               | 0.45 kg (0.99 lb)  |  |  |
| Ingress Protection   | on            | IP67   |  |  |
| Vandal Resistan  | ce            | IK10 for metal casing  |  |  |
| Certification  |               | FCC, CE, RoHS, UL compliant  |  |  |
| Web Interface  |               |  |  |  |
| Installation Man   | nagement      | Web-based configuration  |  |  |
| Maintenance  |               | -  |  |  |
| Access from Web Browser  |               | Live View, Video Recording, Change Video Quality, Bandwidth Control, Image Snapshot, Text Overlay, Image Masking   |  |  |
| Language   |               | Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese  |  |  |
| Software Applicat  | tion          |  |  |  |
| Software Supported   |               | GV-VMS (V17.4.1 / 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)   |  |  |
| Smart Device Ac  | ccess         | GV-Eye for iOS and Android   |  |  |
| Live Viewing   |               | Browser (IE, Edge, Chrome), Mobile App   |  |  |
| Access from Web Browser  Language  Software Application  Software Supported  Smart Device Access |               | Snapshot, Text Overlay, Image Masking  Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portugues Russian, Spanish, Traditional Chinese  GV-VMS (V17.4.1 / 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 W version (V2.0.0), GV-Redundant / Failover Server (V1.2.0)  GV-Eye for iOS and Android |  |  |

#### Note:

- 1. It is required to apply patch files to all or some of the 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.

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### **Packing List**

- 1. GV-TVD8810 IR Vandal Proof Dome
- 2. Waterproof Rubber Set
- 3. Screw Kit

- 4. Drill Template Paster
- 5. Torx Wrench
- 6. Download Guide

### Accessories

| Model No.  | Name                           |     | Details  |
|--|--------------------------------|-----|--|
| GV-Mount107<br>(must be used with<br>GV-Mount212-2)                      | Pendant Bracket                |     | Dimensions: Ø 120 x 334 mm<br>(Ø 4.72" x 13.15")<br>Weight: 0.74 kg (1.63 lb)  |
| GV-Mount211-2  | Wall Mount and<br>Junction Box |     | Dimensions: Ø 253 x 125 x 125 mm<br>(Ø 10 x 4.9 x 4.9")<br>Weight: 0.92 kg (2.02 lb)   |
| GV-Mount212-2  | Wall Box Mount                 |     | Dimensions: Ø 145 x 40 mm<br>(Ø 5.7 x 1.6")<br>Weight: 0.24 kg (0.5lb)   |
| GV-Mount300-2  | Convex Corner<br>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<br>Mount        |     | Dimensions: 111.2 x 369.9 x 210 mm (2.6" x 11.4" x 6.6")<br>Weight: 1.65 kg (3.64 lb)  |
| GV-Mount420<br>(must be used with<br>GV-Mount211-2)                      | Pole Mount Bracket             | -0  | Dimensions: Ø 20 x 120 x 53.4 mm<br>(Ø 4.7 x 4.7 x 2.1")<br>Steel Strap Diameter: Ø 67 ~ 127 mm<br>(Ø 2.6" ~ 5")<br>Weight: 0.45 kg (0.99 lb)                    |
| GV-Mount606  | In-Ceiling Mount               | 0)9 | Dimensions: Ø 235 x 63 mm<br>(Ø 9.3" x 2.5")<br>In-ceiling hole: Ø 195 mm (Ø 7.67")<br>Weight: 0.49 kg (1.1 lb)  |
| GV-Mount704<br>(must be used with<br>GV-Mount107)                        | Extension Tube                 |     | 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) |
| GV-Mount921<br>(for standard US<br>single and double<br>gang boxes only) | Power Box Mount<br>Bracket     |     | Dimensions: Ø 145 x 13 mm<br>(Ø 5.7" x 0.5")<br>Weight: 0.13 kg (0.29 lb)  |

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| GV-PA191      | Power over Ethernet<br>(PoE) Adapter | Control of the second of the s | GV-PA191 is a Power over Ethernet (PoE) adapter designed to provide power to the IP device through a single Ethernet cable.  |
|---------------|--------------------------------------|--|--|
| 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.   |

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