

## **GV-TMS20811 AI 4 x 5MP Quad-Sensor Multi-Directional H.265 5x Zoom Super Low Lux WDR Pro IR IP Dome**



- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 4 adjustable lenses in one camera cover up to 360° field of view
- 1/2.7" progressive scan super low lux CMOS sensor
- Min. illumination at 0.002 lux
- Wide Dynamic Range Pro (WDR Pro)
- Day / Night functionality (with removable IR-cut filter)
- Intelligent IR
- IR distance up to 50 m (165 ft)
- Triple streams from H.265, H.264
- Up to 30 fps at 2880 x 1620
- Two-way audio capable
- Built-in microphone
- Built-in microSD card slot (SD / SDHC / SDXC) for local storage
- DC 24V / AC 24V / High PoE (IEEE 802.3bt)
- 3-axis mechanism (pan / tilt / rotate)
- Ingress protection (IP67)
- Vandal resistance (IK10 for metal casing)
- AI analytics available for 4 channels concurrently (Intrusion, Cross Line, Enter Area, Leave Area, Face Detection, People Flow Counting, Crowd Density Monitoring)
- Defog
- 3D noise reduction
- Motion detection
- Tampering alarm
- Text overlay
- Privacy mask
- 12 languages supported
- ONVIF (Profile G, S, T, M) conformant

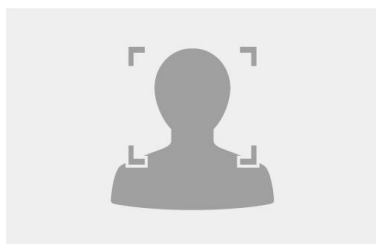
### **Introduction**

GV-TMS20811 is an outdoor motorized network camera with 4 adjustable lenses, providing a 360° field of view and AI function support for 4 channels concurrently. It features four 5 MP CMOS image sensors to deliver a video resolution of 2880 x 1620 at up to 30 fps and is equipped with an automatic IR-cut filter and nine 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. It adheres to IP67 and IK10 standards and can be powered through PoE.

Empowered by deep learning algorithms, 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.

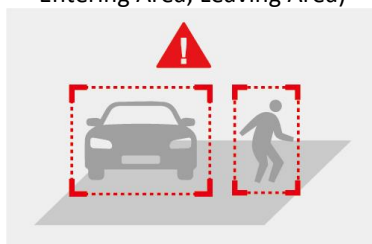
## Deep Learning Function

### Face Detection

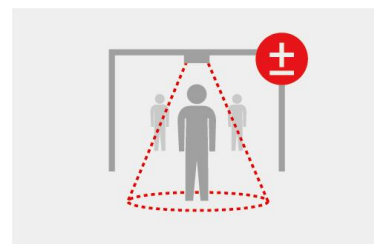


### AI Perimeter Protection

(Intrusion, Crossing Line, Entering Area, Leaving Area)



### People Flow Counting



## Specifications

Camera					
Image Sensor		1/2.7" progressive scan super low lux CMOS			
Picture Elements		2880 (H) x 1620 (V)			
Minimum Illumination	Color	0.002 Lux (F1.2, AGC ON)			
	B/W	0.001 Lux (F1.2, AGC ON)			
	IR On	0 Lux			
Shutter Speed		Auto / Manual (1 ~ 1/100000 sec)			
White Balance		Automatic, Manual			
Gain Control		Automatic, Manual			
S/N Ratio		52 dB			
WDR		WDR Pro			
Dynamic Range		130 dB			
Lens					
Megapixel		5 MP for each lens			
Day / Night		Yes (with removable IR-cut filter)			
Lens Type		Motorized varifocal			
Focal Length		2.7 ~ 13.5 mm			
Maximum Aperture		F/1.2			
Mount		Ø 14 mm			
FOV	Horizontal	110.3° ~ 31°			
	Vertical	57.1° ~ 17.5°			
	Diagonal	143.4° ~ 38.1°			
Operation	Focus	Auto / Manual			
	Zoom	5x Optical Zoom			
	Iris	Fixed			
IR LED	Quantity	9 IR LEDs			
	Max. IR Distance	50 m (165 ft)			
DORI		Detect	Observe	Recognize	Identify
Lens	2.7 mm	70.9 m (232.5 ft)	28.4m (93.0 ft)	14.2m (46.5 ft)	7.1 m (23.3 ft)
	13.5 mm	247.5 m (812.0 ft)	99.0m (324.8 ft)	49.5m (162.4 ft)	24.8 m (81.2 ft)
Operation					
Video Compression		H.265, H.264, MJPEG			
Video Streaming		Triple streams from H.265, H.264, or MJPEG			
Frame Rate		30 fps at 2880 x 1620, 2688 x 1520, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720 (60 / 50 Hz) * The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).			
Maximum Throughput		50 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 Settings		Brightness, Saturation, Contrast, Sharpness, Flicker-less, 2D Noise Reduction, 3D Noise Reduction, Exposure Compensation, Metering Control (BLC), Smart Illumination (Infrared), White Balance, Defog, Dewarping, 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	3 input (dry contact, NO / NC)
	Output	2 relay output (30V DC, 1A / 125V AC, 0.5A)
<b>Video Resolution</b>		
Main Stream		2880 x 1620 (Default), 2688 x 1520, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720, 720 x 576, 640 x 360, 704 x 288, 352 x 288
Sub Stream		1920 x 1080 (Default), 1280 x 720, 720 x 576, 640 x 480, 640 x 360, 704 x 288, 352 x 288
Third Stream (Closed by Default)		720 x 576, 640 x 360, 704 x 288, 352 x 288
<b>Network</b>		
Interface		10/100/1000 Ethernet
Protocol		802.1X (including EAP-TLS), ARP, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, ONVIF (Profile G, S, T, M), PPPoE, QoS, RTCP, RTP, RTSP, SMTP, SNMP, SSL/TLS, SSH, TCP, UDP, UPnP
<b>Deep Learning Function</b>		
AI Analytics		<ul style="list-style-type: none"> <li>- <u>Human &amp; Vehicle Classification</u>: Line Crossing Detection / Intrusion / Region Entrance / Region Exiting / People Flow Counting / Crowd Density Monitoring</li> <li>- <u>Object &amp; Activity Analysis</u>: Face Detection</li> </ul> <p>* Due to the limited performance of the camera, Line Crossing Detection, Intrusion, Region Entrance, and Region Exiting can be enabled at the same time, but not People Flow Counting, Crowd Density Monitoring, and Face Detection.</p>
<b>Mechanical</b>		
Camera Angle Adjustment	Pan	0° ~ 360°
	Tilt	0° ~ 65°
	Rotate	0° ~ 355°
Connector	Power Input	3-pin Power Input wire
	Power Output	2-pin terminal block with pitch 3.81 mm (0.15 in) * The Power Output port supplies power to external microphones and speakers.
	Ethernet	RJ-45 connector
	RS-485	Half-duplex, 2-pin terminal block with pitch 3.81 mm (0.15 in) * The RS-485 port is used for input/output data transmission.
	Audio	Built-in microphone
		Yes
		External microphone required
		Yes (3-pin terminal block with pitch 3.81 mm or 0.15 in)
		Built-in speaker
		No
		External speaker required
		Yes (3-pin terminal block with pitch 3.81 mm or 0.15 in)
		* Choose either the built-in or external microphone. * The Audio In port only supports microphones with a power supply.
	Digital I/O	4-pin terminal block with pitch 3.81 mm (0.15 in)
	Local Storage	microSD card slot (SD / SDHC / SDXC), up to 512 GB
<b>General</b>		
Operating Temperature		-30°C ~ 60°C (-22°F ~ 140°F)
Humidity		5% ~ 95% (no condensation)
Power Source		DC 24V, 2.5A / AC 24V, 2.5A / PoE++ (IEEE 802.3bt, 60 W)
Max. Power Consumption		48.7 W
Power Output		DC 12V, 100mA
Dimensions		Ø 318 × 136.6 mm (Ø 12.5 x 5.4 in)
Weight		4.77 kg (10.52 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 GV-IP Device Utility

Access from Web Browser	Live View, Playback, Image Quality, Video Recording, Bandwidth Control, Image Snapshot, Digital Zoom, Voice Intercom, 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 (V17.4.8 / V18.3.5 or later, patch files required), GV-Control Center (V4.2.1.0 or later, patch files required), GV-Recording Server / Video Gateway (V2.1.1 or later, patch files required), GV-Edge Recording Manager for Windows (V2.3.0 or later) * GV-TMS20811 occupies four channels of GV-VMS.
Smart Device Access	GV-Eye for iOS / Android (V3.4.2 or later)
Live Viewing	Browser (Edge, IE mode in Edge, Chrome, Firefox), Mobile App


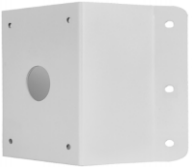
**Note:**



1. Do not use clothes or any ordinary material to clean the camera cover since they may result in scratches.
2. Specifications are subject to change without notice.

### Packing List

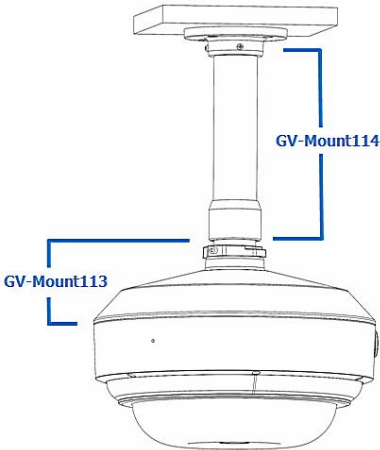
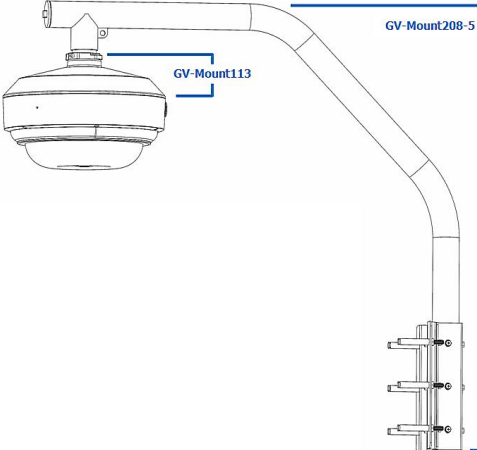
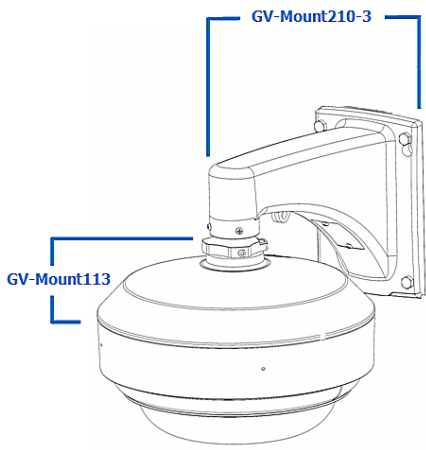
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|------------------------------------|--------------------------|
| 1. GV-TMS20811 Quad-Sensor IR Dome | 5. Drill Template Paster |
| 2. Mount Bracket                   | 6. Protective Tape       |
| 3. Waterproof Rubber Set           | 7. Torx Wrench           |
| 4. Screw Kit                       | 8. Download Guide        |

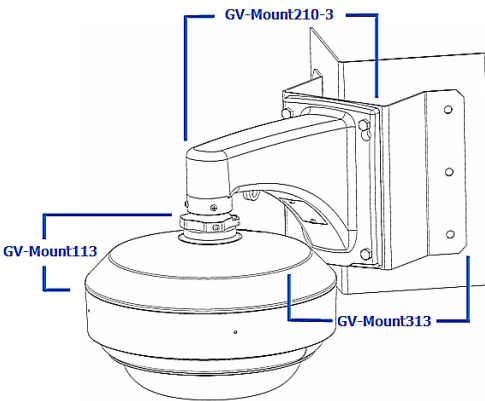
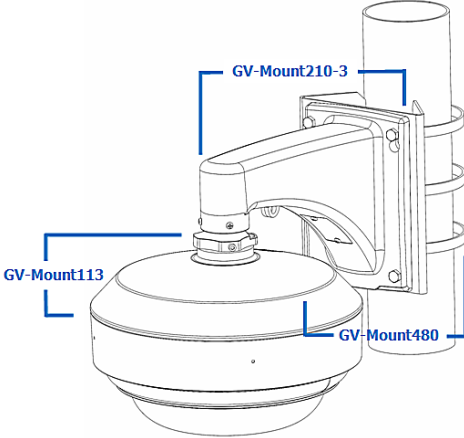
### Accessories

Model No.	Name		Details
GV-Mount113 (must be used with Mount114, Mount208-5, or Mount210-3)	Pendant Adapter Plate		Dimensions: Ø 318 x 116 mm (Ø 12.5 x 4.6 in) Weight: 1.3 kg (2.9 lb)
GV-Mount114 (must be used with Mount113)	Pendant Mount		Dimensions: Ø 116.5 x 239 mm (Ø 4.6 x 9.4 in) Weight: 0.67 kg (1.5 lb)
GV-Mount208-5 (must be used with Mount113)	Swan Neck Mount		Dimensions: 879 x 831 x 166 mm (34.6 x 32.7 x 6.5 in) Weight: 4.3 kg (9.47 lb)
GV-Mount210-3 (must be used with Mount113)	Wall Pendant Mount		Dimensions: 216 x 141 x 313 mm (8.5 x 5.6 x 12.3 in) Weight: 1.0 kg (2.2 lb)
GV-Mount313 (must be used with Mount210-3)	Convex Corner Mount		Dimensions: 215 x 230 x 125 mm (8.5 x 9.1 x 5 in) Weight: 0.73 kg (1.6 lb)

GV-Mount480 (must be used with Mount210-3)	Pole Mount Bracket		Dimensions: 215 x 172 x 65 mm (8.5 x 6.8 x 2.6 in) Weight: 0.55 kg (1.2 lb)
GV-PA903BT	Gigabit BT PoE++ Adapter		Dimensions: 170 x 100 x 40 mm (6.69 x 3.94 x 1.57 in) Weight: 760 g (1.68 lb)
GV-POE Switch	The GV-POE Switch can be used for data transmission only. It does not provide power to GV-TMS20811 cameras.		
Power Adapter	Contact our sales representatives for the countries and areas supported.		

## Mounting Type

Pendant Mount	Swan Neck Mount	Wall Pendant Mount
GV-Mount113 + GV-Mount114	GV-Mount113 + GV-Mount208-5	GV-Mount113 + GV-Mount210-3
		

Convex Corner Mount	Pole Bracket Mount
GV-Mount113 + GV-Mount210-3 + GV-Mount313	GV-Mount113 + GV-Mount210-3 + GV-Mount480
	

## Dimensions

