

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)
- AI analytics available for 4 channels concurrently (Intrusion, Cross Line, Enter Area, Leave Area, Face Detection, People Flow Counting, Crowd Density Monitoring)
- 3D noise reduction, ROI video optimization reduction
- Motion detection
- Tampering alarm
- Text overlay
- Privacy mask, 10 layers
- 12 languages supported
- ONVIF (Profile G, S, T, M) conformant ISO/IEC27001:2022, ISO 9001:2015, ISO 14001:2015, CVE/CNA, Compliance NIS2, GDPR AI ACT E Cyber Resilience ACT
- Signed Firmware & Supply Chain Security:
- Installation and update are allowed exclusively for manufacturer-signed firmware. Firmware components are documented through a Software Bill of Materials (SBOM)

EU Certification



Certificazioni CyberSecurity e presso Lab.certificati Accredia

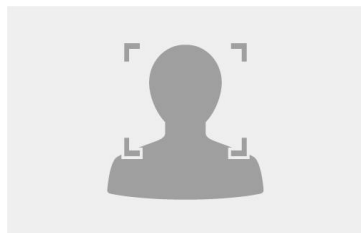
Introduction

The GV-TMS20811 is an AI-powered quad-sensor multi-directional IP dome camera designed to deliver comprehensive 360° coverage with a single device. Featuring four adjustable 5 MP sensors, 5× optical zoom, and H.265 compression, it provides high-quality video at resolutions up to 2880 × 1620 at 30 fps while optimizing bandwidth efficiency. With super low-light performance, WDR Pro, and intelligent IR illumination up to 50 m, the camera ensures reliable day and night surveillance.

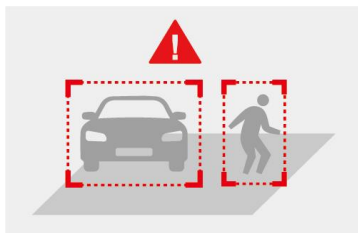
Powered by AI deep learning analytics, the GV-TMS20811 supports human and vehicle classification and enables advanced perimeter protection, people flow counting, and crowd density monitoring across four channels simultaneously. Built for demanding environments, it features IP67 and IK10 protection, supports High PoE (IEEE 802.3bt), and integrates seamlessly with professional video management systems.

Deep Learning Function

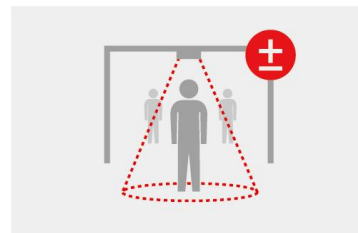
Face Detection



AI Perimeter Protection



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)			
	Black/White	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			
Storage Recording		Recording Failover, Edge			
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)
Video Resolution		
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
Network		
Interface		10/100/1000 Ethernet
Protocol / Cybersecurity		802.1X (including EAP-TLS), ARP, DDNS, DHCP, DNS, FTP, HTTP (digest), 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, MQTT, IP Filtering, Password Brute force protection, Sistem Log preserved
Deep Learning Function		
AI Analytics	Sensor 1	- Perimeter Protection (Human & vehicle classification): Cross Line, Enter Serea, Leave Area Intrusion.
	Sensor 2	
	Sensor 3 Sensor 4	-Face Detection, People Flow Counting, Crowd Density Monitoring.
*Within a sensor, all Perimeter Protection rules can be enabled together. However, due to hardware resource limitations, only one AI function per sensor can be enabled at a time: Perimeter Protection, Face Detection, People Flow Counting, or Crowd Density Monitoring.		
*Each sensor can have an AI function enabled independently.		
Mechanical		
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	Shielded 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, AES 218
General		
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		30 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
Certification		CE, FCC, RoHS, UL compliant

Web Interface	
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
Applications	
Software Supported	GV-VMS (V17.4.8 / V18.3.5 or later, patch files required), GV-Control Center (V4.2.1 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-IP Device Utility (V9.0.3 or later) * GV-TMS20811 occupies four channels of GV-VMS.
Smart Device Access	GV-Eye for iOS / Android (V3.5.0 or later)
Live Viewing	Browser (Edge, IE mode in Edge, Chrome, Firefox), Mobile App
Security	
Advanced Security Features	• Signed Firmware & Secure Firmware Upgrade • Secure Boot (software-based) • Multi-User Access Management with Role-Based Permissions • Mandatory Password Change at First Login • Digest Authentication • Account Lockout & Automatic IP Blocking after Failed Login Attempts • IP Address Filtering (Whitelist / Blacklist) • Tamper-Resistant System Logs (Preserved After Reset) • HTTPS / TLS Encrypted Communications • Firmware SBOM (Software Bill of Materials) available

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

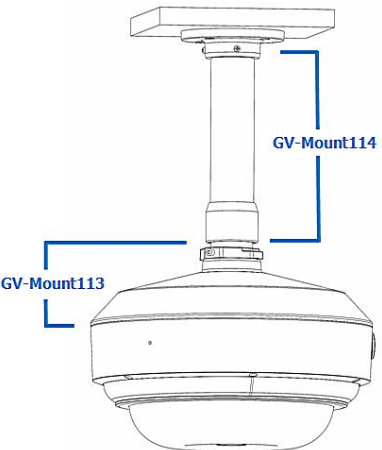
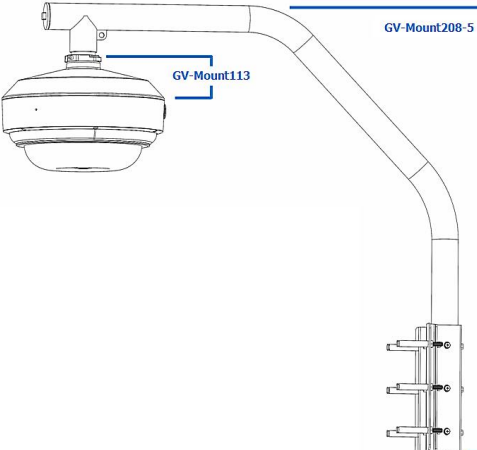
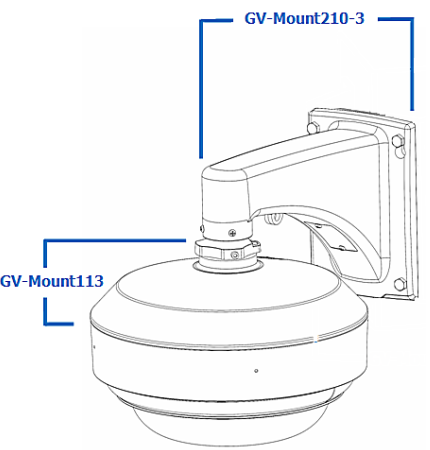
Packing List

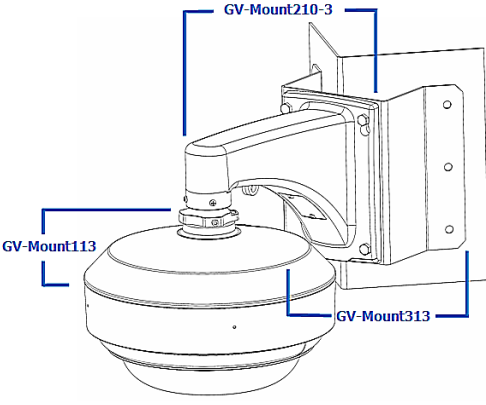
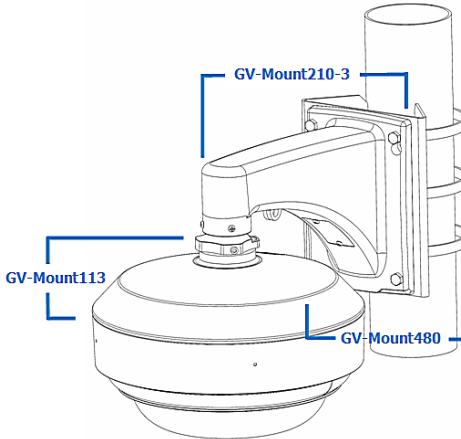
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|------------------------------------|--------------------------|
| 1. GV-TMS20811 Quad-Sensor IR Dome | 5. Drill Template Paster |
| 2. Mount Bracket | 6. Protective Tape |
| 3. Waterproof Rubber Set | 7. Torx Wrench |
| 4. Screw Kit | 8. Download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

Accessories

Model No.	Name		Details
GV-Mount113 (must be used with GV-Mount114, GV-Mount208-5 or GV-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 GV-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 GV-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 GV-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 GV-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 GV-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

