

GV-FER5702 Cloud AI 6MP H.265 Super Low Lux WDR Pro IR Fisheye Rugged IP Camera



EU Certification



Certificazioni CyberSecurity e presso Lab. certificati Accredia

Introduction

The GV-FER5702 is a cloud-enabled AI fisheye IP camera designed to provide 360° panoramic coverage for comprehensive situational awareness. Equipped with a 6 MP progressive scan CMOS sensor, H.265 compression, and WDR Pro, it delivers high-quality video with optimized bandwidth usage even in low-light conditions.

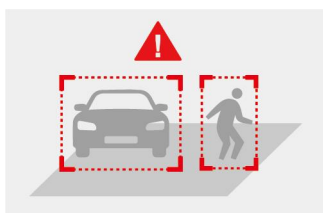
Powered by AI deep learning analytics, the camera supports advanced functions such as AI perimeter protection, people flow counting, and intelligent event detection. With on-edge fisheye dewarping, direct-to-cloud connectivity, intelligent IR illumination, and robust IP67 and IK10 protection, the GV-FER5702 is ideal for indoor and outdoor installations requiring efficient monitoring, simplified system architecture, and secure cloud-based video management.

Key Features

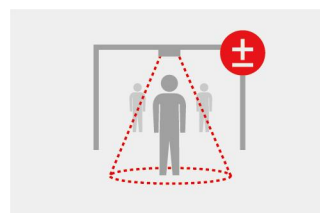
- Direct-to-Cloud
- AI deep learning: AI Perimeter Protection & Classification (Human, Vehicle)
- 1/2.5" progressive scan CMOS sensor
- Min. illumination at 0.01 lux
- Triple streams from H.265, H.264, or MJPEG
- Native Resolution 2564 x 2564
- Wide Dynamic Range Pro (WDR Pro)
- Day / Night functionality (with removable IR-cut filter)
- Intelligent IR
- IR distance up to 20 m (66 ft)
- Two-way audio capable
- Built-in microphone
- Built-in microSD card slot (SD / SDHC / SDXC) for local storage
- DC 12V / PoE (IEEE 802.3af)
- Ingress protection (IP67)
- Vandal resistance (IK10)
- 360° and 180° panorama view
- GV-Center V2 connection
- AI analytics (Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Target Counting, Heat Map, Crowd Density)
- Defog
- 3D noise reduction, ROI video optimization reduction
- Motion detection
- Virtual PTZ function
- Auto Pan function
- Text overlay
- Privacy mask 10 layers
- 19 languages supported
- ONVIF (Profile G, S, T) 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)

Deep Learning Function

AI Perimeter Protection



People Flow Counting



Specifications

Camera					
Image Sensor		1/2.5" progressive scan CMOS			
Picture Elements		3200 (H) x 1800 (V)			
Minimum Illumination	Color	0.01 Lux (F2.0, AGC ON)			
	Black/White	0 Lux			
	IR On	0.1 Lux			
Shutter Speed		Auto / Manual (1/3 ~ 1/100000 sec)			
White Balance		Auto / Manual			
Gain Control		Auto / Manual			
S/N Ratio		50 dB			
WDR Pro		Yes			
Dynamic Range		120 dB			
Lens					
Megapixel		6 MP			
Day/Night		Yes (with removable IR-cut filter)			
Lens Type		Fixed			
Focal Length		1.65 mm			
Maximum Aperture		F/2.0			
Mount		M12			
Image Format		1/2.5"			
FOV	Horizontal	180°			
	Vertical	180°			
	Diagonal	180°			
Operation	Focus	Fixed			
	Zoom	Fixed			
	Iris	Fixed			
IR LED	Quantity	4 IR LEDs			
	Max. IR Distance	20 m (66 ft)			
DORI		Detect	Observe	Recognize	Identify
Lens	1.65 mm	33 m (108.2 ft)	13.1 m (42.9 ft)	6.6 m (21.6 ft)	3.3 m (10.8 ft)
Operation					
Video Compression		H.265, H.265+, H.264, H.264+, MJPEG			
Video Streaming		Triple streams from H.265, H.264, or MJPEG			
Frame Rate		Max. 30 fps (60 Hz) / 25 fps (50 Hz) at 3200 x 1800, 2160 x 2160, 1920 x 1080, 1440 x 1440, 1280 x 720, 1080 x 1080, 960 x 960, 720 x 720, 640 x 640, 640 x 360, 480 x 480, 360 x 360 Max. 20 fps (50 & 60 Hz) at 2560 x 1440 * The frame rate and the performance may vary depending on the number of connections and data bitrates (different scenes).			
Maximum Throughput		80 Mbps			
Maximum Streams		10			
Storage Recording		Recording Failover, Edge			

* When the total bitrate is within the maximum throughput			* By default, 2 connections are occupied whether connected to GV-Cloud VMS or not.		
Video Analytics			Motion Detection		
Smart Alarm			Motion Detection, SD Card Error, SD Card Full, IP Address Conflict, Cable Disconnection, Tampering Alarm		
Image Settings			Brightness, Contrast, Hue, Saturation, Sharpness, 3D Noise Reduction, Defog, BLC, Antiflicker, Smart IR, Image Orientation (Flip, Mirror, 0°, 180°)		
Stream Mode & Supported Live Preview	1: Fisheye		Fisheye View		
	2: Panoramic View		Panoramic View (Ceiling / Desktop: 180° x 2, Wall: 360°)		
	3: Fisheye + Panoramic View + 3 PTZ		Fisheye View, Panoramic View (Ceiling / Desktop: 180° x 2, Wall: 360°), Fisheye View + PTZ x 3, Panoramic View (Ceiling / Desktop: 180° x 2, Wall: 360°) + PTZ x 3		
	4: Fisheye + 4 PTZ		Fisheye View, PTZ x 4		
	5: Fisheye + 4 PTZ Fusion		Fisheye View, 4 PTZ Fusion		
Installation Method & Supported Live Preview	Ceiling Mount		Fisheye View, 180° Panoramic View x 2, Fisheye View + PTZ x 3, 180° Panoramic View x 2 + PTZ x 3, PTZ x 4, 4 PTZ Fusion		
	Wall Mount		Fisheye View, 360° Panoramic View, Fisheye View + PTZ x 3, 360° Panoramic View + PTZ x 3, PTZ x 4, 4 PTZ Fusion		
	Desktop Mount		Fisheye View, 180° Panoramic View x 2, Fisheye View + PTZ x 3, 180° Panoramic View x 2 + PTZ x 3, PTZ x 4, 4 PTZ Fusion		
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 (DC 30V, 1A / AC 125V, 0.3A)		
Video Resolution					
Hardware (On-Edge) Dewarping	Main Stream (only in Edge IE mode)	Fisheye View		2160 x 2160 (default), 1440 x 1440, 1080 x 1080	
		Panoramic View (Ceiling / Desktop: 180° x 2, Wall: 360°)		3200 × 1800 (default), 2560 x 1440, 1920 × 1080	
		PTZ		1280 × 720 (default)	
		4 PTZ Fusion		2560 × 1440 (default)	
	Sub Stream	Fisheye View		960 × 960 (default), 720 x 720, 480 × 480	
		Panoramic View (Ceiling / Desktop: 180° x 2, Wall: 360°)		1280 x 720 (default), 640 x 360	
		PTZ		N/A	
		4 PTZ Fusion		640 x 360 (default)	
	Third Stream	Fisheye View		640 x 640 (default), 360 x 360	
		Panoramic View (Ceiling / Desktop: 180° x 2, Wall: 360°)		1280 x 720 (default), 640 x 360	
		PTZ		N/A	
		4 PTZ Fusion		640 x 360 (default)	
Network					
Interface			10/100 Ethernet		
Protocol / Cybersecurity			802.1x, DDNS, DHCP, DNS, FTP, HTTP (digest), HTTPS, IPv4, IPv6, NTP, ONVIF (Profile G, S, T), PPPoE, QoS, RTCP, RTMP, RTP, RTSP, SMTP, SNMP, TCP/IP, UDP, UPnP, MQTT, IP Filtering, Password Brute force protection, Sistem Log preserved		

Deep Learning Function			
AI Analytics	Only the following configurations of Stream Modes and Installation Methods enable smart detection events. <u>Configuration 1:</u> Modes: 1, 3, 4, 5 Mounting: Ceiling Functions: ➢ <u>Human detection only:</u> Target Counting by Line, Line Crossing, Region Entrance, Region Exiting, Region Intrusion, Crowd Density, Heat Map <u>Configuration 2:</u> Modes: 2, 3 Mounting: Wall or Desktop Functions: ➢ <u>Human and vehicle detection:</u> Target Counting by Line, Line Crossing, Region Entrance, Region Exiting, Region Intrusion ➢ <u>Human detection only:</u> Crowd Density * A maximum of 1 smart detection event is allowed at a time to ensure comprehensive detection results and optimized performance by the camera. * Once connected to GV-Cloud VMS / GV-Center V2, up to 1 smart detection event is supported.		
Mechanical			
Connectors	Power	DC jack, PoE	
	Ethernet	Shielded RJ-45 connector	
	RS-485	Half-duplex	
	Audio	Built-in microphone	Yes
		External microphone required	Yes (audio jack, 3.5 mm or 0.14 in)
		Built-in speaker	No
		External speaker required	Yes (audio jack, 3.5 mm or 0.14 in)
		* Choose either the built-in or external microphone. * The Audio In port only supports microphones with a power supply.	
	Video Output	CVBS output (BNC connector x 1)	
Digital I/O	4-pin terminal block pitch 3.5 mm (0.14 in)		
Local Storage	microSD card slot (SD / SDHC / SDXC), up to 256 GB, AES 218		
General			
Operating Temperature		-30°C ~ 60°C (-22°F ~ 140°F)	
Humidity		0% ~ 95% (no condensation)	
Power Source		DC 12V / PoE (IEEE 802.3af)	
Max. Power Consumption		10 W	
Dimension		Ø 130.6 x 46.3 mm (Ø 5.14 x 1.82 in)	
Weight		516.2 g (1.14 lb)	
Warranty		5 years	
Vandal Resistance		IK10	
Certification		CE, FCC, RoHS compliant, UL Compliance	
Web Interface			
Installation Management		Web-based configuration	
Maintenance		Encrypted File System (Data at Rest), Firmware upgrade through Web Browser or Utility	
Access from Web Browser		Live View, Playback, Image Quality, Video Recording (only in Edge IE mode), Image Snapshot, Two-Way Audio (only in Edge IE mode), Digital Zoom, Bandwidth Control, Virtual PTZ, Auto Pan, Text Overlay, Image Masking, Intelligent Mark	
Language		Chinese Traditional, Czech, Dutch, English, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Spanish (Latin America), Turkish	

Applications	
Software Supported	GV-VMS (V17.4.8 / V18.3.5 or later, patch files required / V20.0.0 or later), GV-Control Center (V4.2.1 or later, patch files required), GV-Edge Recording Manager for Windows (V2.3.0 or later), GV-Recording Server (V2.1.1 or later, patch files required), GV-Center V2 (V18.4.1 or later, patch files required), GV-Cloud VMS (V1.2.1 or later), GV-IP Device Utility (V9.0.2 or later)
Smart Device Access	GV-Eye for iOS (V3.1.0 or later), GV Eye for Android (V3.1.1 or later)
Live Viewing	Web Browser (Edge, IE mode in Edge, Chrome, Firefox, Safari), 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

Packing List

- GV-FER5702
- Waterproof Rubber Set
- Screw Kit
- Drill Template Paster
- Download Guide

Accessories

Model No.	Name		Details
GV-Mount112	Pendant Mount		Dimensions: Ø 131.1 x 220.7 mm (Ø 5.16 x 8.69 in) Weight: 0.55 kg (1.21 lb)
GV-Mount211-11	Wall Mount Bracket		Dimensions: 194.7 x 165.6 x 131.1 mm (7.67 x 6.52 x 5.16 in) Weight: 0.57 kg (1.26 lb)
GV-Mount470 (must be used with Mount211-11)	Pole Mount Bracket		Dimensions: 163.3 x 54.5 x 215 mm (6.43 x 2.15 x 8.46 in) Weight: 1.10 kg (2.43 lb)
GV-Mount314 (must be used with Mount211-11)	Corner Mount Bracket		Dimensions: 215 x 121.4 x 215 mm (8.46 x 4.78 x 8.46 in) Weight: 2.05 kg (4.52 lb)

GV-Mount512	Junction Box		Dimensions: 131.0 x 156.9 x 33.0 mm (5.16 x 6.18 x 1.30 in) Weight: 0.24 kg (0.53 lb)
GV-PA191	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.		

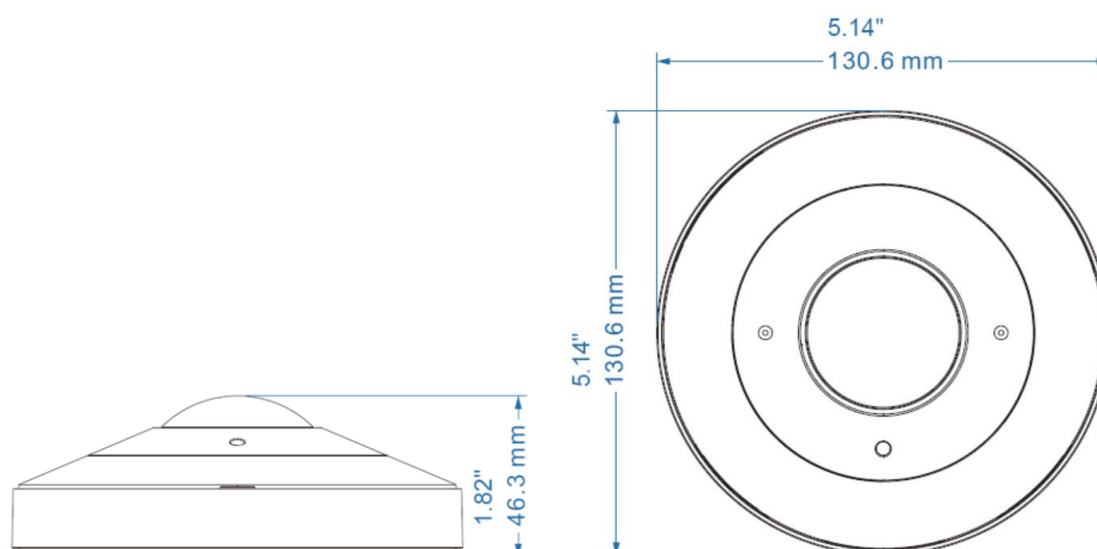
Mounting Type

Pendant Mount	Wall Bracket Mount	Junction Box Mount
GV-Mount112	GV-Mount211-11	GV-Mount512
		

Wall Bracket Mount	Pole Bracket Mount
GV-Mount211-11	GV-Mount470
	

Wall Bracket Mount	Corner Mount Bracket
GV-Mount211-11	GV-Mount314
	

Dimensions



Note:

1. To avoid reflected glare by IR LED, keep a minimum distance of 1 m (3.28 ft) between the camera body and nearby walls.
2. Using a pendant or corner mount with a fisheye camera may cause IR reflection due to the camera's 360° IR illumination.
3. To use GV-Cloud VMS, avoid connecting to other GV-Software at the same time.
4. To use GV-Cloud VMS, a microSD card must be installed. Industrial-grade microSD cards are recommended to avoid event recording failures.
5. Upon the initial connection of GV-Cloud Camera to GV-Cloud VMS, the Standard Plan will be provided for free for 180 days.
6. GV-Center V2 Standard / Pro can only receive motion events from GV-Cloud IP Cameras. To receive AI and PVD events, GV-Center V2 AI is required.
7. All specifications are subject to change without notice.