

# GV-PFER12800

AI 12MP H.265 Super Low Lux WDR Pro IR Fisheye Rugged IP Camera



12MP

Fixed

AI

Super Low Lux

IP67

IK10

WDR Pro

## Introduction

GV-PFER12800 is a 12 MP outdoor fisheye camera allowing you to monitor all angles of a location and can be installed to the ceiling or the wall. The camera supports H.265 video codec to achieve better compression ratio while maintaining high quality image at reduced network bandwidths. The camera adheres to IP67 and IK10 standards and can be powered through PoE. Also, the camera is capable of performing on-edge dewarping of images itself rather than consuming resources from the backend devices.

Empowered by deep learning algorithms, AI technology distinguishes humans from other moving objects. Integrated with GeoVision Video Management Software (VMS), it supports AI perimeter protection, real time alert, events playback and more.

## Key Features

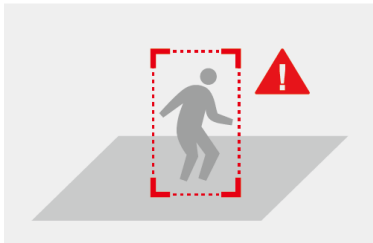
- AI deep learning: Smart Perimeter Protection (Humans)
- 1/1.7" progressive scan CMOS sensor
- Min. illumination at 0.005 lux
- Dual streams from H.265, H.264
- Up to 30 fps at 3000 x 3000
- 6 on-edge dewarping modes
- Day and Night function (with removable IR-cut filter)
- Intelligent IR
- IR distance up to 15 m (50 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
- Two-way audio capable
- Built-in microphone
- DC 12V/ PoE (IEEE 802.af)
- Provides 360° and 180° panorama view
- Wide Dynamic Range Pro (WDR Pro)
- AI analytics (Region Entrance, Region Exiting, Advanced Motion Detection, Line Crossing, Loitering, People Counting)

- 3D noise reduction
- Motion detection
- Virtual PTZ function
- Auto Pan function
- Privacy mask
- Text overlay
- 20 languages on Web interface
- ONVIF (Profile G, S, T, M) conformant
- SIP/VoIP Support

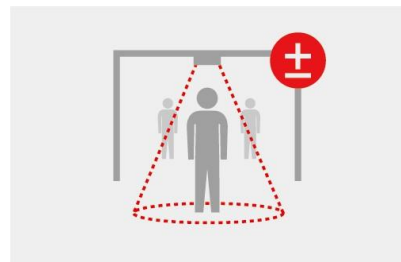
### Deep Learning Function

#### AI Perimeter Protection

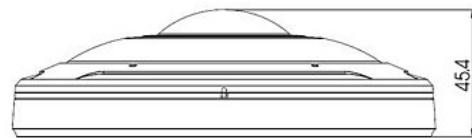
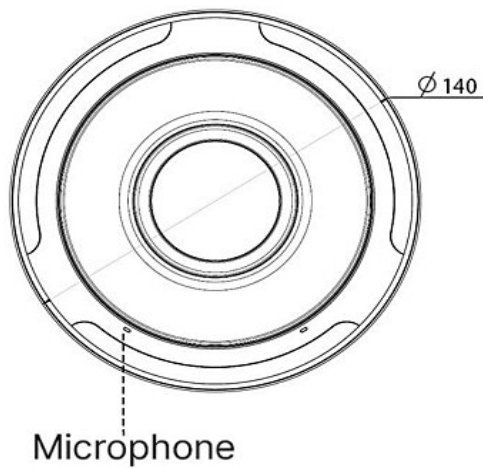
(Intrusion, Crossing Line, Enter Area, Leaving Area)



#### People Counting



### Dimensions



## Specifications

Camera		
Image Sensor	1/1.7" progressive scan CMOS	
Picture Elements	4000 (H) x 3000 (V)	
Minimum Illumination	Color	0.005 Lux (F2.8, AGC ON)
	IR On	0 Lux
Shutter Speed	Auto / Manual (1 ~ 1/100000s)	
White Balance	Auto / Manual	
S/N Ratio	55 dB	
WDR Pro	Yes	
Dynamic Range	120 dB	
Optics Lens		
Megapixel	Yes	
Day/Night	Yes (with removable IR-cut filter)	
Lens Type	Fixed	
Focal Length	1.98 mm	
Maximum Aperture	F/2.8	
Mount	M12	
Image Format	1/1.7"	
Horizontal FOV	180°	
Operation	Focus	Fixed
	Zoom	Fixed
	Iris	Fixed
IR LED Quantity	6 IR LEDs	
Max. IR Distance	15 m (50 ft)	
Operation		
Video Compression	H.265, H.264	
Video Streaming	Dual streams from H.265 & H.264	
Frame Rate	30 fps at 3000 x 3000, 2560 x 2560, 1920 x 1920, 1280 x 1280, 1280 x 960, 1024 x 1024, 736 x 736, 576 x 576 (60 Hz) 25 fps at 3000 x 3000, 2560 x 2560, 1920 x 1920, 1280 x 1280, 1280 x 960, 1024 x 1024, 736 x 736, 576 x 576 (50 Hz) *The frame rate and the performance may vary depending on the number of connections and data bitrates (different scenes).	
Video Analytics	Motion Detection, Tamper Detection, Network Disconnection, Audio Alarm, External Input, Object Left, Object Removed, Heat Map *Tamper detection and audio alarm are only accessible through the camera's Web interface, which can be used to trigger alerts such as e-mail and FTP	
Heat Map	On / Off	
Image Setting	Brightness, Contrast, Saturation, Sharpness, Flicker-less, 3D Noise Reduction, WDR, White Balance, Display Mode.	
Hardware Dewarping	Ceiling Mount	Fisheye View, 180° Panoramic View, 180° Panoramic View x 2, PTZ x 4, Fisheye View + PTZ x 3, 180° Panoramic View + PTZ x 3
	Wall Mount	Fisheye View, 180° Panoramic View, PTZ x 4, Fisheye View + PTZ x 3, 180° Panoramic View + PTZ x 3
	Flat Mount	Fisheye View, 180° Panoramic View, 180° Panoramic View x 2, PTZ x 4, Fisheye View + PTZ x 3, 180° Panoramic View + PTZ x 3
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)
Video Resolution		
Software Dewarping	Main Stream	3000 x 3000 (Default), 2560 x 2560, 1920 x 1920, 1280 x 1280
	Sub Stream	1280 x 960, 1024 x 1024, 736 x 736 (Default), 576 x 576

Hardware Dewarping	Main Stream	Fisheye	3000 x 3000, 2560 x 2560, 1920 x 1920, 1280 x 1280
		180° Panoramic View	2944 x 736, 2560 x 640, 1920 x 480
		180° Panoramic View x 2	3008 x 1504, 2688 x 1344, 1920 x 960, 1280 x 640
		PTZ x 4	3840 x 2176, 3072 x 1728
		Fisheye View + PTZ x 3	3840 x 2176, 3072 x 1728
	Sub Stream	180° Panoramic View + PTZ x 3	3840 x 2176, 3072 x 1728
		Fisheye	1280 x 960, 1024 x 1024, 736 x 736, 576 x 576
		180° Panoramic View	1920 x 480, 1280 x 320, 1024 x 256
		180° Panoramic View x 2	1280 x 640, 704 x 352, 640 x 320
		PTZ x 4	1920 x 1088, 1280 x 720
		Fisheye View+ PTZ x 3	1920 x 1088, 1280 x 720
		180° Panoramic View + PTZ x 3	1920 x 1088, 1280 x 720
<b>Network</b>			
Interface		10/100/1000 Ethernet	
Protocol		IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP, RTSP, RTMP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP, NTP, SMTP, SNMP, UPnP, Bonjour, SIP, PPPoE, VLAN, 802.1x, QoS, IGMP, ICMP, SSL, ONVIF (Profile G, S, T, M)	
<b>Deep Learning Function</b>			
AI Analytics		Region Entrance, Region Exiting, Advanced Motion Detection, Line Crossing, Loitering, People Counting *Vehicle recognition is currently not applicable.	
<b>Mechanical</b>			
Connectors	Power	DC Jack	
	Ethernet	RJ-45	
	Audio	1 in (Built-in or external microphone) 1 out (4-pin terminal block pitch 3.5 mm (0.14")) *The Audio In port only supports microphones with power supply.	
	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.	
<b>General</b>			
Operating Temperature		-40°C ~ 60°C (-40°F ~ 140°F)	
Humidity		0% ~ 90% (no condensation)	
Power Source		12V DC / PoE (IEEE 802.3af)	
Max. Power Consumption		11 W	
Dimension		Ø 140 x 45.4 mm (Ø 5.5" x 1.8")	
Weight		700 g (1.54 lb)	
Ingress Protection		IP67	
Vandal Resistance		IK10	
Certification		CE, FCC, RoHS compliant	
<b>Web Interface</b>			
Installation Management		Web-based configuration	
Maintenance		Firmware upgrade through Web Browser or GV-IP Device Utility	
Language		English, Korean, Traditional Chinese, Turkish, German, Polish, Italian, Japanese, French, Persian, Portuguese, Russian, Czech, Dutch, Thai, Bulgarian, Arabic, Slovenian, Finnish, Spanish	






Applications	
Software Supported	GV-VMS (V17.4.7 / V18.3.2, patch files required), GV-Edge Recording Manager (V2.2.7), GV-Control Center (V4.2.0, coming soon), GV-Recording Server (V2.1.0)
Smart Device Access	GV-Eye for iOS and Android (V3.1.0, coming soon)
Live Viewing	Browser (IE, Edge, Chrome, Firefox, Safari)

- Note:**
- To avoid reflected glare by IR LED, keep a minimum distance of 1 M (3.28 ft) between the camera body and nearby walls.
  - All specifications are subject to change without notice.

### Packing List

- |                                |                   |
|--------------------------------|-------------------|
| 1. GV-PFER12800 Fisheye Camera | 4. Trox Wrench    |
| 2. Waterproof Rubber Set       | 5. Hex Key H2.0   |
| 3. Screw Kit                   | 6. Download Guide |

### Accessories

Model No.	Name		Details
GV-Mount211-7	Wall Mount Bracket		Dimensions: 238 x 159 x 136 mm (9.37" x 6.26" x 5.35") Weight: 560 g (1.23 lb)
GV-Mount508	Junction Box		Dimensions: 145 x 167 x 33.5 mm (5.71" x 6.57" x 1.32") Weight: 200 g (0.44 lb)
GV-Mount430 (must be used with GV-Mount211-7)	Pole Mount Bracket		Dimensions: 170 x 51.5 x 152.6 mm (6.69" x 2.03" x 6.01") Weight: 720 g (1.59 lb)
GV-PA191	Power over Ethernet (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. GV-PoE Switch is available in various models with different numbers and types of ports.