GV-PFER12800　AI 12MP H.265 Super Low Lux WDR Pro IR Fisheye Rugged IP Camera

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. Furthermore, the camera has the capability to conduct on-edge fisheye dewarping, eliminating the need to utilize recourses 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.
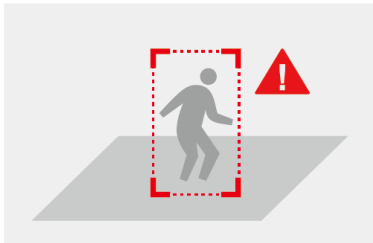
Key Features

- 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
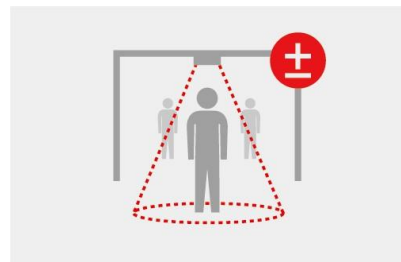- SIP/VoIP Support

Deep Learning Function
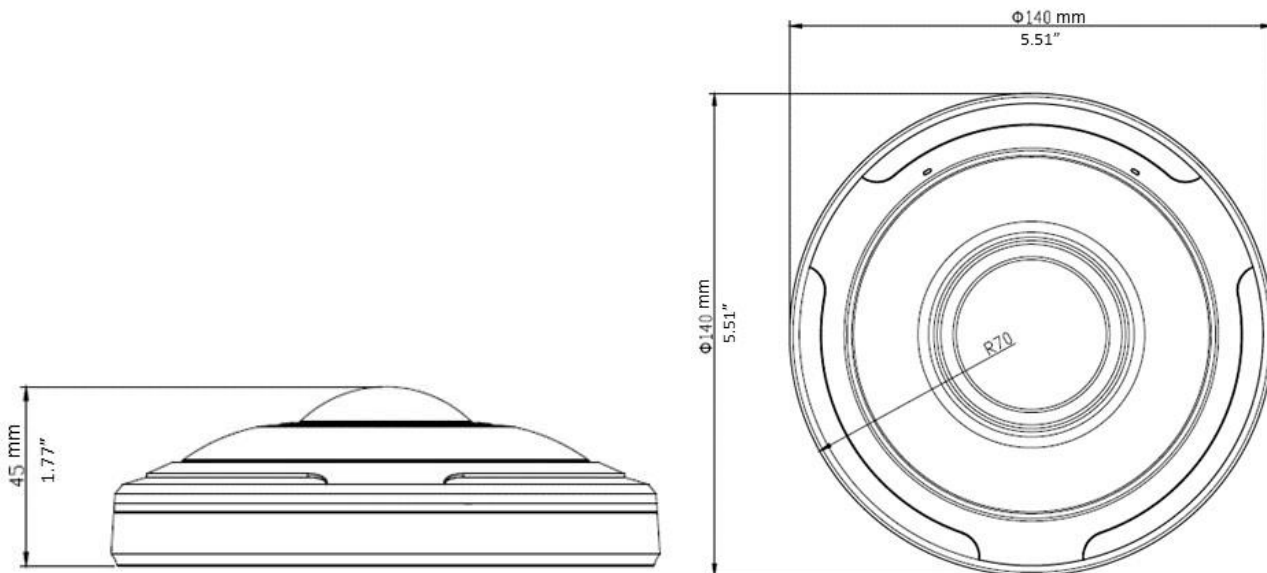
AI Perimeter Protection
(Intrusion, Crossing Line, Enter Area, Leaving Area)

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)

DORI		Detect	Observe	Recognize	Identify
Lens	1.98 mm	38.4 m (125.9 ft)	15.2 m (49.8 ft)	7.3 m (23.9 ft)	3 m (9.8 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 (On-Edge) 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 (On-Edge) 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
		180° Panoramic View + PTZ x 3	3840 x 2176, 3072 x 1728
	Sub Stream	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
Network			
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)
Deep Learning Function			
AI Analytics			Region Entrance, Region Exiting, Advanced Motion Detection, Line Crossing, Loitering, People Counting *Vehicle recognition is currently not applicable.
Mechanical			
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.
General			
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
Web Interface			
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:

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. All specifications are subject to change without notice.

Packing List

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

Accessories

Model No.	Name		Details
GV-Mount109	Pendant Mount		Dimensions: Ø144 x 290 mm (Ø5.66" x 11.41") Weight: 400 g (0.88 lb)
GV-Moun110 (must be used with GV-Mount109)	Extension Lever		Dimensions: Ø57 x 255 mm (Ø2.24" x 10.03") Weight: 325 g (0.71 lb)
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.
Power Adapter			Contact our sales representatives for the countries and areas supported.