GV-FER12203   12MP H.264 Low Lux Fisheye Rugged IP Camera

Introduction

GV-FER12203 is a 12 MP outdoor fisheye camera allowing you to monitor all angles of a location and can be installed to the ceiling and the wall. Equipped with automatic IR-cut filter and IR LEDs, GV-FER12203 is capable of day and night surveillance. Without installing any software, you can watch live view and utilize functions such as motion detection, privacy mask and alert notification through its Web interface. In addition, the camera seamlessly integrates with GV-DVR / NVR / VMS, providing advanced monitoring and video management features.
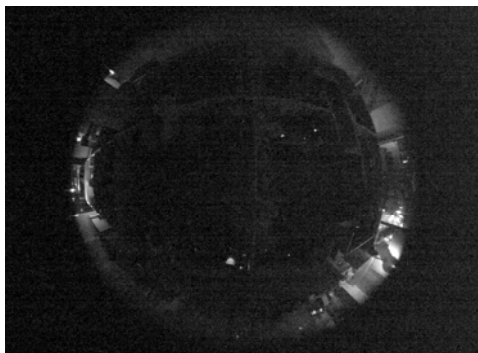
Key Features

- 1/1.7'' progressive scan CMOS
- Dual streams from H.264 and MJPEG
- Up to 15 fps at 4000 x 3000
- Day and night (with removable IR-cut filter)
- Intelligent IR
- Vandal resistance (IK10+ for metal casing)
- Ingress protection (IP67)
- 12V DC / 24V AC / PoE+ (IEEE 802.3at)
- Built-in micro SD card slot (SD/SDHC/SDXC/UHS-I) for local storage
- One sensor input and alarm output
- Built-in microphone
- Digital Object Tracking
- Provides 360° and 180° panorama view
- Different angle of view accessible by multiple users at the same time
- Playback from any view angle and zoom level
- No mechanical moving parts
- Two-way audio
- Low lux enhancement
- 3D noise reduction
- Smart streaming
- Tampering alarm
- Virtual PTZ function
- Auto Pan function
- Privacy mask
- Visual automation
- Text overlay
- 31 languages on Web interface
- ONVIF (Profile S) conformant
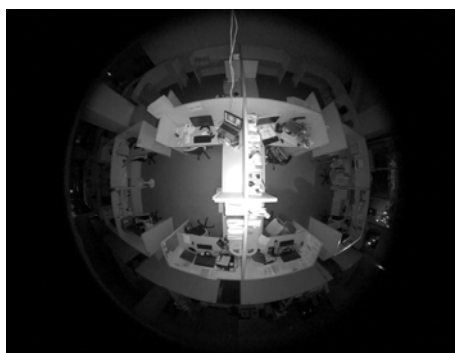- Recording assigned by GV-Edge Recording Manager (Windows version)

* No Memory Card Slot & local storage function for Argentina.
* Smart streaming requires either GV-NVR V8.7.0.0 or GV-VMS V16.10.0.0.

The following is a comparison of live view between a third-party fisheye camera and a GV-Fisheye Camera with IR LED.

Third-Party Fisheye Camera

GV-Fisheye Camera with IR LED

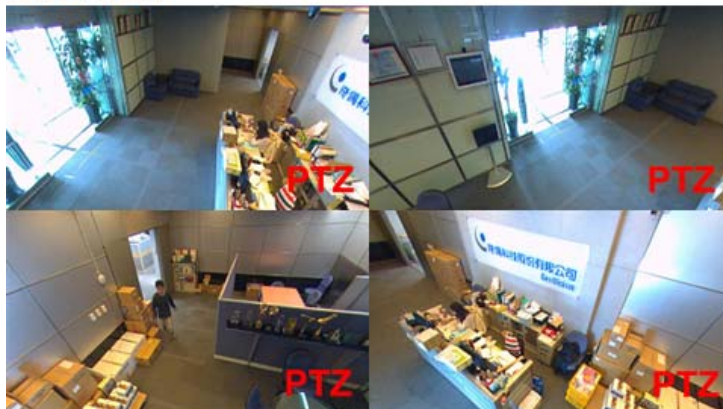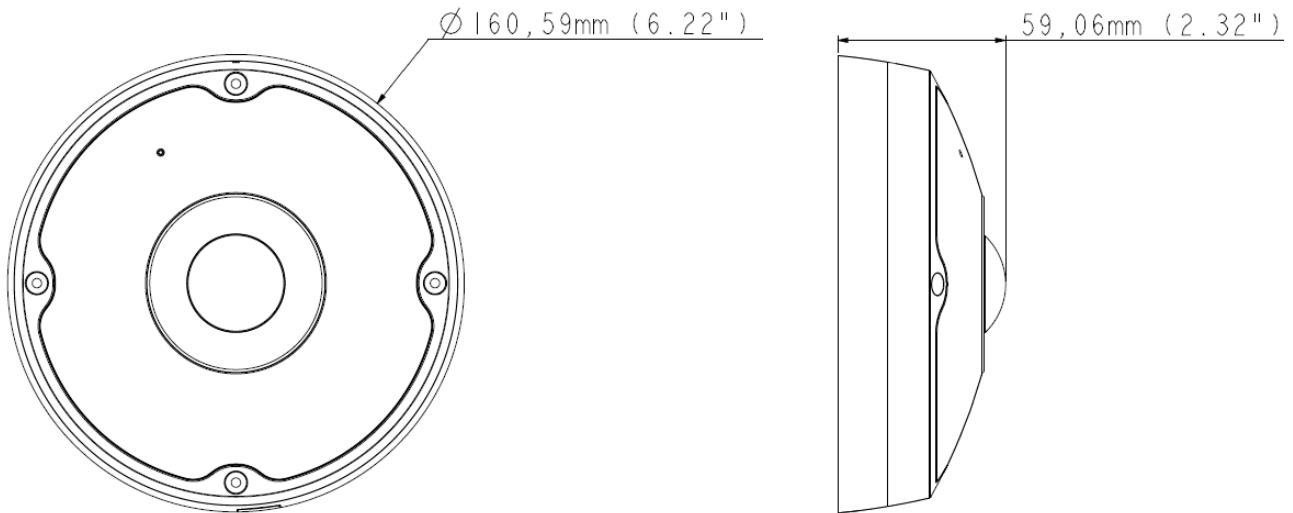## Photos

Fisheye Source Image

Single View

2 x 180° View

360° View

Quad View

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Dimensions

Specifications

System Requirements	
CPU	Intel Core i5-4670, 3.40 GHz
Memory	DDR3 8 GB RAM
On Board Graphics	Intel HD Graphics 4600 (Versions of driver from year 2014 or later required)
Camera	
Image Sensor	1/1.7" progressive scan CMOS
Picture Elements	4000 (H) x 3000 (V)
Minimum Illumination — Color	0.1 Lux
Minimum Illumination — B/W	0.05 Lux
Minimum Illumination — IR On	0 Lux
Shutter Speed	Automatic, Manual (1/30 ~ 1/16000 sec)
White Balance	Automatic, Manual (2800K ~ 8500K)
Gain Control	Automatic
S/N Ratio	52 dB
Optics Lens	
Megapixel	Yes
Day/Night	Yes (with removable IR-cut filter)
Lens Type	Fixed
Focal Length	1.83 mm
Maximum Aperture	F/2.4
Mount	M12
Image Format	1/1.7"
Horizontal FOV	180°
Operation — Focus	Fixed
Operation — Zoom	Fixed
Operation — Iris	Fixed
IR LED Quantity	6 IR LEDs
Max. IR Distance	30 m (98.43 ft)
Operation	
Video Compression	H.264, MJPEG
Video Streaming	Dual streams from H.264 or MJPEG
Frame Rate	15 fps at 4000 x 3000, 25 fps at 2896 x 2768 (60/50 Hz) *The frame rate and the performance may vary depending on the number of connections and data bitrates (different scenes).

Image Setting		Brightness, Contrast, Saturation, Sharpness, Gamma, White Balance, Flicker-less, Image Orientation, Shutter Speed, D/N, Denoise, Low Lux Enhancement, Metering
Audio Compression		G.711
Audio Support		Two-way Audio (external speaker required)
Sensor Input		1 input (Dry Contact)
Sensor Output		1 Digital Output (200mA 5V DC)

Video Resolution

Main Stream	4:3	4000 x 3000 (Default)
	20:19	2896 x 2768
Sub Stream	4:3	640 x 480 (Default)
	20:19	640 x 608

Network

Interface		10/100/1000 Ethernet
Protocol		DHCP, DNS, DynDNS, FTP, HTTP, HTTPS, ICMP, IPv4, NTP, ONVIF (Profile S), QoS (DSCP), RTCP, RTSP, SNMP, SMTP, SSL, TCP/IP, UDP, UPnP, 3GPP/ISMA
Wireless LAN		IEEE 802.11 b/g/n (not functional)
Antenna Type		External
Security		WEP, WPA-PSK(TKIP), WPA-PSK(AES), WPA2-PSK(TKIP), WPA2-PSK(AES)

Mechanical

Temperature Detector		Yes
Connectors	Power	2-pin terminal block (DC 12V, 3.5A), PoE
	Ethernet	RJ-45
	Audio	1 In (Built-in or external microphone) 1 Out (Stereo phone jack, 3.5 mm / 0.14")
	Digital I/O	3-pin terminal block, pitch 2.5 mm (0.1")
	Auto Iris	None
	Local Storage	Micro SD card slot (SDHC/SDXC/UHS-I, Class 10) * UHS-II card type is not supported.
	USB	USB hard drive

General

Operating Temperature	-40°C ~ 50°C (-40°F ~ 122°F)
Humidity	10% to 90% (no condensation)
Power Source	12V DC / 24V AC / PoE+ (IEEE 802.3at)
Max. Power Consumption	28 W
Dimension	Ø 160.59 x 59.06 mm m (Ø 6.22" x 2.32")
Weight	700 g (1.54 lb)
Ingress Protection	IP67
Vandal Resistance	IK10+ for metal casing
Regulatory	CE, FCC, RCM, LVD, RoHS compliant

Power over Ethernet

PoE Standard	PoE+ (IEEE 802.3at Power over Ethernet / PD)
PoE Power Supply Type	End-Span
PoE Power Output	Per Port 48V DC, 600mA. Max. 30 watts

Web Interface

Installation Management	Web-based configuration
Maintenance	Firmware upgrade through Web Browser or Utility
Access from Web Browser	Camera Live View, Video Recording, Change Video Quality, Bandwidth Control, Image Snapshot, Digital I/O Control, Audio, Picture in Picture, Picture and Picture, Motion Detection, Privacy Mask, Visual Automation, Tampering Alarm, Auto Pan Function, Virtual PTZ, Wide Angle Lens Dewarping, Text Overlay
Language	Arabic / Bulgarian / Czech / Danish / Dutch / English / Finnish / French / German / Greek / Hebrew / Hungarian / Indonesian / Italian / Japanese / Lithuanian / Norwegian / Persian / Polish / Portuguese / Romanian / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Swedish / Thai / Traditional Chinese / Turkish

Applications	
Network Storage	GV-VMS / DVR / NVR, GV-Backup Center, GV-Recording Server
Live Viewing	IE, Mobile App
CMS Server Support	GV-Control Center, GV-Center V2, GV-Vital Sign Monitor

Note:
1. Do not use clothes or any ordinary material to clean the camera cover since they may result in scratches.
2. Mind the following when using an inserted memory card for recording:
   - Recorded data on the memory card can be damaged or lost if the data are accessed while the camera is under physical shock, power interruption, memory card detachment or when the memory card reaches the end of its lifespan. No guarantee is provided for such causes.
   - The stored data can be lost if the memory card is not accessed for a long period of time. Back up your data periodically if you seldom access the memory card.
   - Memory cards are expendable and their durability varies according to the conditions of the installed site and how they are used. Back up your data regularly and replace the memory card annually.
   - To avoid power outage, it is highly suggested to apply a battery backup (UPS).
   - For better performance, it is highly suggested to use Micro SD card of MLC NAND flash, Class 10.
   - Replace the memory card when its read/write speed is lower than 6 MB/s or when the memory card is frequently undetected by the camera.
3. Specifications are subject to change without notice.

Packing List

1. Fisheye Camera
2. Back Plate
3. Plate Screw x 3
4. Plastic Screw Anchor x 3
5. Torx Wrench
6. RJ-45 Connector
7. Data Cable
8. Terminal Block
9. Installation Sticker
10. Ruler
11. Silica Gel Bag x 2
12. Power Adapter
13. Download Guide
14. Warranty Card

Note: The power adapter can be excluded upon request.

Accessories

Model No.	Name		Details
GV-Mount100	Straight Tube and Junction Box Kit		Dimensions: 200 x 170 x 257.5 mm (7.9" x 6.7" x 10.1") Weight: 3.17 kg (6.99 lb)
GV-Mount101	Straight Tube Kit		Dimensions: 219 x 125 x 332 mm (8.6" x 4.9" x 13.1") Weight: 1.8 kg (3.97 lb)

Model No.	Name		Details
GV-Mount200	Wall Pendant Mount		Dimensions: 225 x 140 x 250 mm (8.9" x 5.5" x 9.8") Weight: 900 g (1.98 lb) **Note:** To ensure the image quality, leave a distance of 1 M or more between the camera body and the wall.
GV-Mount203	Wall Mount and Junction Box		Dimensions: 315 x 195.5 x 225 mm (12.4" x 7.7" x 8.9") Weight: 2.95 kg (6.5 lb) **Note:** To ensure the image quality, leave a distance of 1 M or more between the camera body and the wall.
GV-Mount206	Wall Box Mount		Dimensions: 126.5 x 211.3 x Ø 176.85 mm (5" x 8.3" x Ø 6.96") Weight: 0.93 kg / 2.06 lb **Note:** To ensure the image quality, leave a distance of 1 M or more between the camera body and the wall.
GV-Mount 208-2	Swan Neck Mount		Dimensions: 1043 x 519 x 256 mm (41.06" x 20.43" x 10.08") Weight 10.5 kg (23.15 lb)
GV-Mount702	Extension Tube		**Four** options are available. Dimensions: Ø 5.4 x 10 or 20 or 30 or 50 cm (Ø 2.1" x 3.9" or 7.9" or 11.8" or 19.7") Weight: 180 g or 390 g or 550 g or 800 g (0.4 lb or 0.86 lb or 1.21 lb or 1.76 lb)

Model No.	Name		Details
GV-Mount903-1	Dome Housing		Dimensions: Ø 185.51 x 165.35 mm (Ø 7.3" x 6.51") Weight: 900 g (1.98 lb)
GV-Mount904-1	Tilting Wall Mount Bracket		Dimensions: Ø 159.1 x 40.5 mm (Ø 6.3" x 1.6") Weight:350 g (0.77 lb)
GV-Mount912	Power Box Mount Bracket		Dimensions: Ø 146 x 10.5 mm (Ø 5.7'' x 0.4'') Weight: 180 g (0.4 lb)
GV-Relay V2			GV-Relay V2 is designed to expand the voltage load of GV IP devices. It provides 4 relay outputs, and each can be set as normally open (NO) or normally closed (NC) independently as per your requirement.
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.