

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



### Introduction

GV-FER12203 is a 12 MP outdoor fisheye camera that allows you to monitor all angles of a location. It can be installed to the ceiling, wall, wall corner and the pole. The camera's distorted hemispherical image can be converted into a conventional rectilinear projection. Without installing any software, you can watch live view and utilize functions such as motion detection, privacy mask, and alert notification through the Web interface. In addition, the camera seamlessly integrates with the GV-System and GV-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 for local storage
- USB slot for WiFi adapter
- 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.**

## Photos

Fisheye Source Image



Single View



2 x 180° View



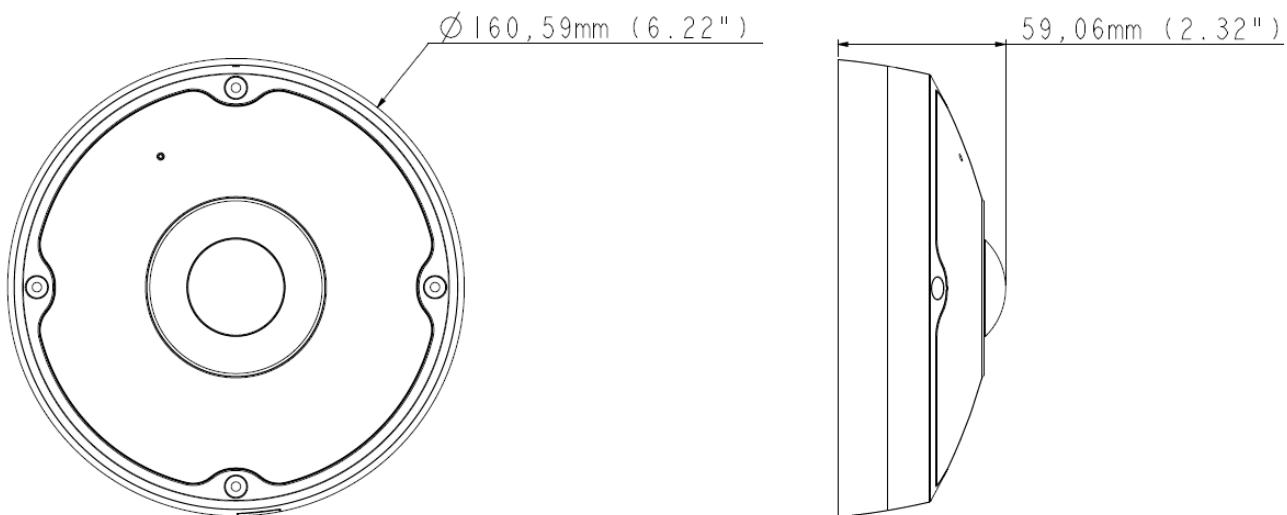
360° View



Quad View



## 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	<table> <tr> <td>Color</td><td>0.1 Lux</td></tr> <tr> <td>B/W</td><td>0.05 Lux</td></tr> <tr> <td>IR On</td><td>0 Lux</td></tr> </table>	Color	0.1 Lux	B/W	0.05 Lux	IR On	0 Lux
Color	0.1 Lux						
B/W	0.05 Lux						
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	<table> <tr> <td>Focus</td><td>Fixed</td></tr> <tr> <td>Zoom</td><td>Fixed</td></tr> <tr> <td>Iris</td><td>Fixed</td></tr> </table>	Focus	Fixed	Zoom	Fixed	Iris	Fixed
Focus	Fixed						
Zoom	Fixed						
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, AAC (optional)
Audio Support		Two-Way Audio
Sensor Input		1 input (Dry Contact)
Sensor Output		1 Digital Output (200mA 5V DC)
<b>Video Resolution</b>		
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
<b>Network</b>		
Interface		10/100/1000 Ethernet
Protocol		DHCP, DynDNS, FTP, HTTP, HTTPS, NTP, ONVIF (Profile S), PSIA, QoS (DSCP), RTSP, SMTP, SNMP, TCP, UDP, UPnP, 3GPP/ISMA
Wireless LAN		IEEE 802.11 b/g/n
Antenna Type		External
Security		WEP, WPA-PSK(TKIP), WPA-PSK(AES), WPA2-PSK(TKIP), WPA2-PSK(AES)
<b>Mechanical</b>		
Temperature Detector		Yes
Connectors	Power	2-pin terminal block, PoE
	Ethernet	RJ-45
	Audio	1 In (Using the built-in microphone or externally connecting a 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	GV-WiFi Adapter or USB hard drive
<b>General</b>		
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 160.6 x 59.1 mm m (6.32" x 2.33")
Weight		700 g (1.54 lb)
Ingress Protection		IP67
Vandal Resistance		IK10+ for metal casing
Regulatory		CE, FCC, RCM, LVD, RoHS compliant
<b>Power over Ethernet</b>		
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
<b>Web Interface</b>		
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-System (GV-DVR/NVR), GV-Backup Center, GV-Recording Server, GV-VMS
Live Viewing	IE, Mobile App
CMS Server Support	GV-Control Center, GV-Center V2, GV-Vital Sign Monitor

**Note:**

1. Specifications are subject to change without notice.
2. Do not use clothes or any ordinary material to clean the camera cover since they may result in scratches.
3. 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.

**Packing List**

1. Fisheye Camera	9. Installation Sticker
2. Back Plate	10. Ruler
3. Plate Screw x 3	11. Silica Gel Bag x 2
4. Plastic Screw Anchor x 3	12. Power Adapter
5. Torx Wrench	13. GV-IPCAM H.264 Software DVD
6. RJ-45 Connector	14. GV-NVR Software DVD
7. Data Cable	15. Warranty Card
8. Terminal Block	

**Note:** The power adapter can be excluded upon request.

**Accessories**

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

Model No.	Name	Details
GV-Mount200	Wall Pendant Tube	 <p>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.</p>
GV-Mount203	Wall Pendant Tube and Junction Box Kit	 <p>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.</p>
GV-Mount206	Wall Mount Bracket Kit	 <p>Dimensions: 126.5 x 211.3 x 176.85 mm / 5 x 8.3 x 6.96 in (L x W x diameter)  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.</p>
GV-Mount702	Extension Tube	 <p><b>Four</b> 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)</p>
GV-Mount903	Fisheye Dome Housing	 <p>Dimensions: Ø 186 x 97.5 mm (Ø 7.3" x 3.8")  Weight: 700 g (1.54 lb)</p>
GV-Mount912	Power Box Mount Bracket	 <p>Dimensions: Ø 146 x 10.5 mm (Ø 5.7" x 0.4")  Weight: 180 g (0.4 lb)</p>
GV-POE Switch		<p>The 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.</p>

Model No.	Name	Details
GV-WiFi Adaptor		<p>Weight: 20 g (0.04 lb)</p> <p>Dimensions: 15 x 15 x 155 mm (0.59" x 0.59" x 6.10")</p> <p>Supplied with mini USB to standard USB adapter.</p> 
Power Adapter		<p>Contact your sales representative for the countries and areas supported.</p>
GV-Relay V2		<p>The 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.</p>