

GV-PTZ5810-IR AI 5MP H.265 5x Zoom Super Low Lux WDR Pro IR IP Mini PTZ





- Al deep learning: Al Perimeter Protection & Classification (Human, Vehicle)
- 1/2.7" progressive scan CMOS sensor
- Min. illumination at 0.003 lux
- Triple streams from H.265, H.264 or MJPEG
- Up to 30 fps at 2880 x 1620
- Motorized varifocal lens for remote focus / zoom adjustments
- 5x optical zoom
- Intelligent IR
- IR distance up to 30 m (100 ft)
- Day and night function (with removable IR-cut filter)
- Wide Dynamic Range Pro (WDR Pro)
- Built-in micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10) for local storage
- Built-in microphone and speaker
- Two-way audio
- DC 12V, PoE+ (IEEE 802.3at)
- Pan 350°
- Tilt from 0° to 90°
- Pan and tilt speed of up to 60° / sec and 50° / sec
- PTZ movement (Preset, Patrol)
- PTZ patrol by schedule
- Auto focus
- 3D noise reduction
- Motion detection
- Privacy mask
- 12 languages supported
- ONVIF (Profile G, M, S, T) conformant

Introduction

GV-PTZ5810-IR is an indoor network PTZ camera that offers 5x optical zoom, capable of showing smooth live view with great details. This camera can simultaneously deliver three video streams in resolutions up to 2880 x 1620 at 30 fps. In low-light environments, night vision is enhanced with its LEDs, which allow up to 30 m (100 ft) effective IR distance. The camera can process scenes with contrasting intensity of lights and produce clear image using the built-in WDR Pro. GV-PTZ5810-IR supports H.265 video codec to achieve better compression ratio while maintaining high quality pictures at reduced network bandwidths.

Wide surveillance coverage is made possible with 350° panning and $0^{\circ} \sim 90^{\circ}$ tilting capacity. PTZ functions such as Preset, and Patrol can be programmed and activated by schedule. GV-PTZ5810-IR supports pan / tilt speeds ranging from a patrol of 60° per second and 50° per second to a slow ramble of 0.1° per second with 0.1° pan accuracy.

GV-PTZ5810-IR July 2, 2024



Deep Learning Function

Face Detection



Al Perimeter Protection (Intrusion, Crossing Line

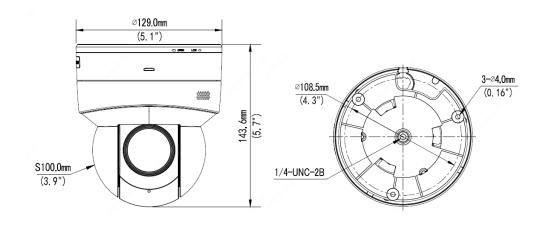
(Intrusion, Crossing Line Entering Area, Leaving Area)



People Flow Counting



Dimensions



Specifications

Camera						
Image Sensor		1/2.7" progressive scan CMOS				
Optical Zoom		5x				
Minimum	Color	0.003 Lux (F1.2, AGC ON)				
Illumination	IR ON	0 Lux				
Electronic Shutter		Auto / Manual (1 ~ 1/100000 sec)				
White Balance		Auto / Manual				
Iris control		Fixed				
AGC control		Auto / Manual				
S/N Ratio		56 dB				
WDR		WDR Pro				
Dynamic Range		Up to 120 dB				
Optical Lens						
Megapixel		5 MP				
Day / Night		Yes (with removable IR-cut filter)				
Lens Type		Motorized varifocal lens				
Focal Length		2.7 ~ 13.5 mm				
Maximum Apertur	re	F/1.2				
Horizontal FOV		30.6° ~ 106.9°				
Operation	Focus	Auto / Manual				
	Zoom	5x				
	Iris	Fixed				
IR LED Quantity		2 IR LEDs				
Max. IR Distance		30 m (100 ft)				



DORI		Detect	Observe	Recognize	Identify		
Lens	2.7 mm	70.9 m (232.5 ft)	28.4 m (93.0 ft)	14.2 m (46.5 ft)	7.1 m (23.3 ft)		
Lens	13.5 mm	247.5 m (812.0 ft)	99.0 m (324.8 ft)	49.5 m (162.4 ft)	24.8 m (81.2 ft)		
Video							
Video Compressio	n	H.265, H.264, MJPEG					
Video Streaming		Triple streams from H.265, H.264 or MJPEG					
	Main Stream	2880 x 1620 (Default), 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720, 720 x 576, 640 x 360					
Video Beeck ties	Sub Stream	1280 x 720, 720 x 576, 640 x 480, 640 x 360 (Default)					
Video Resolution	Third Stream (Closed by Default)	720 x 576, 704 x 288, 640 x 360, 352 x 288					
Frame Rate		30 fps at 2880 x 1620, 30 fps at 2560 x 1440, 30 fps at 2304 x 1296,30 fps at 1920 x 1080 (60 / 50 Hz) * The frame rate and performance may vary depending on the number of connections and data bitrates (different scenes).					
Video Analytics		Motion Detection, Tampering Alarm, Audio Detection *Tampering alarm and audio detection are only accessible through the camera's Web interface, which can be used to trigger alerts such as e-mail and FTP					
Image Setting		Brightness, Saturatio	n, Contrast, Sharpness	, Image Orientation (Fli	p, Mirror, 0°, 180°)		
Audio							
Audio Compressio	n	G.711					
Audio Support		Two-way Audio					
Deep Learning Fund	tion						
Al Analytics		Cross Line, Intrusion, Enter Area, Leave Area, Face Detection, People Flow Counting, Crowd Density Monitoring					
Network							
Interface		10/100 Ethernet	10/100 Ethernet				
Protocol		802.1x, ARP, DHCP, DDNS, DNS, DynDNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, NTP, ONVIF (Profile G, M, S, T), PPPoE, QoS, RTCP, RTP, RTSP, SMTP, SNMP, TCP, UDP, UPnP					
Mechanical							
	Power	DC 12V, PoE+ (IEEE 8	02.3at)				
	Ethernet	10/100 Base-TX, RJ-4	5 connector				
	Audio	Two-way Audio (Buil	t-in microphone and sp	eaker)			
Connectors	Local Storage	Micro SD card slot (SD / SDHC / SDXC / UHS-I, Class 10) *UHS-II card types are not supported.					
	Digital I/O	I/O wires					
	RS-485	RS-485 wires					
Operation							
Pan Travel		350°					
Tilt Travel		0° ~ 90°					
Manual Casad	Pan	0.1° ~ 60°/s					
Manual Speed	Tilt	0.1° ~ 50°/s					
Preset Speed	Pan	60°/s					
	Tilt	50°/s					
Presets	Max. Number	255					
Patrol	Max. Number	16					
	Max. Actions Allowed	32					
OSD		8					
Privacy Mask		24					
Proportional Pan & Tilt		Manual (Pan and tilt speed proportional to zoom ratio)					
Automatic Function		Preset, Patrol					
Mechanical Flip		Yes					
Digital Slow Shutter		On / Off					
Motion Detection		On / Off					
Wide Dynamic Rai	nge	On / Off					

GV-PTZ5810-IR July 2, 2024

- 3 -

July 2, 2024



Image Rotation		Normal, Flip Vertical, Flip Horizontal, 180°		
3D Noise Reduction		0~255		
Alarm	Digital I/O	1 Input, dry contact, NO / NC		
	Digital I/O	1 Relay Output (AC 125V 0.5A / DC 30V 1A)		
	Reaction	Alarm Output, PTZ to Preset, Trigger Storage		
General				
Operating Temperature		-10°C ~ 50°C (14°F ~ 122°F)		
Humidity		95% (non-condensing)		
Dimensions		Ø129 x 143.6 mm (Ø5.1" x 5.7")		
Weight		0.75 kg (1.65 lb)		
Power Source		DC 12V, PoE+ (IEEE 802.3at)		
Power Consumption		15W		
Certification		CE, FCC, RoHS, UL compliant		
Web Interface				
Installation Management		Web-based configuration		
Maintenance		Firmware upgrade through Web Browser or Utility		
Access from Web Browser		Live View, Video Recording, Change Video Quality, Bandwidth Control, Image Snapshot, Text Overlay, Image Masking		
Language		Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese		
Software Applicat	ions			
Software Supported		GV-DVR / NVR (V8.9.1), GV-VMS (V17.4.3 / V18.2.1), GV-Control Center (V3.8.0 / V4.0.1 GV-Edge Recording Manager Windows Version (V2.0.0), GV-Recording Server / Video Gateway (V2.0.1), GV-Redundant / Failover Server (V1.2.0), GV-Mobile Server (V1.5.1), GV-AI Guard (V1.0.0)		
Smart Device Access		GV-Eye for iOS and Android		
Live Viewing		Browser (IE, Edge, Chrome, Firefox), Mobile App		

Note:

- 1. It is required to apply patch files to some of the supported software.
- 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 recommended to apply a battery backup (UPS).
 - For better performance, it is highly recommended that you use a micro SD card of SDHC/SDXC, 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.
- 4. Specifications are subject to change without notice.

Packing List

- 1. GV-PTZ5810-IR Mini PTZ
- 2. Screw Kit

- 3. Drill Template Paster
- 4. Download Guide

- 4 GV-PTZ5810-IR



Accessories

Model No.	Name		Details	
GV-Mount107	Pendant Bracket		Dimensions: Ø120 x 334 mm (Ø4.72" x 13.15") Weight: 0.74 kg (1.63 lb) *must be used with GV-Mount212P	
GV-Mount211P	Wall Mount and Junction Box		Dimensions: Ø233 x 126 x 126 mm (Ø9.2" x 5" x 5") Weight: 1 kg (2.2 lb)	
GV-Mount212P	Wall Box Mount		Dimensions: Ø126 x 36 mm (Ø5.0" x 1.4") Weight: 0.22 kg (0.48 lb)	
GV-Mount300-2	Convex Corner Mount		Dimensions: 137 x 233 x 160 mm (5.4" x 9.17" x 6.3") Weight: 1.65 kg (3.64 lb)	
GV-Mount310-2	Concave Corner Mount		Dimensions: 111.2 x 369.9 x 210 mm (2.6" x 11.4" x 6.6") Weight: 1.65 kg (3.64 lb)	
GV-Mount420	Pole Mount Bracket		Dimensions: \emptyset 120 x 120 x 53.4 mm (\emptyset 4.7" x 4.7" x 2.1") Weight: 0.45 kg (0.99 lb) Steel Strap Diameter: \emptyset 67 $^{\sim}$ 127 mm (\emptyset 2.6" $^{\sim}$ 5") *must be used with GV-Mount211P	
GV-Mount704	Extension Tube	.111	Dimensions: Ø3.5 x 10 or 20 or 30 or 50 cm (Ø1.38" x 3.9" or 7.9" or 11.8" or x 19.7") Weight: 225 g or 360 g or 500 g or 780 g (0.5 lb or 0.79 lb or 1.1 lb or 1.72 lb) *must be used with GV-Mount107	
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.		

GV-PTZ5810-IR July 2, 2024

- 5 -