

## GV-LPR2812-DL AI 2MP H.265 10x Zoom Super Low Lux WDR Pro LPR IR

### Bullet IP Camera



- Built-in deep learning LPR processor for license plate recognition
- Dual-lane recognition
- 1/2.8" progressive scan super low lux CMOS
- Min. illumination at 0.04 lux
- Third streams from H.265, H.264 and MJPEG
- Up to 30 fps at 1920 x 1080
- Motorized varifocal lens for remote zoom / focus adjustment
- Intelligent IR
- IR distance up to 22 m (70 ft)
- Day and Night function (with removal IR-cut filter)
- Wide Dynamic Range Pro (WDR Pro)
- DC 12V / PoE (IEEE 802.3af)
- Ingress protection (IP67)
- Vandal resistance (IK10 for metal casing)
- One-way audio capable
- Built-in microSD card slot (SD / SDHC / SDXC / UHS-I, Class 10) for local storage
- Digital I/O (1 in / 1 out)
- Recognize vehicles with speeds up to 100 km/h (62 mph)
- Standalone database
- Log Export
- LPR results overlaid on recognition images
- Motion detection
- Privacy mask
- IP address filtering
- CE, FCC, LVD, RoHS, UKCA compliant

### Introduction

GV-LPR2812-DL is equipped with a built-in deep learning LPR processor capable of recognizing license plate numbers. It can compare captured license plates against its on-device **standalone database**, the database stored in the **GV-ASManager access control system**, or the **GV-Cloud Access Control platform**. When a match is found, the GV-LPR2812-DL can grant vehicle access by triggering a gate or barrier to open.

GV-LPR2812-DL is a 2 MP, 10x zoom color network camera designed to recognize non-reflective and reflective license plates on vehicles traveling at up to 100 km/h (62 mph). Thanks to its motorized lens and intelligent IR, the camera's zoom and focus can be adjusted remotely, and its shutter speed automatically adapts to the scene to capture clear license plate images in low-light conditions. It complies with IP67 and IK10 standards and can withstand temperatures ranging from -20°C (-4°F) to 55°C (131°F).

### Video Source



### Plate Recognition



**GV-LPR2812-DL**

### Database and Monitoring Options



**GV-ASManager**

or



**Cloud-based GV-Cloud Access Control**

## Specifications

### Camera

Image Sensor	1/2.8" progressive scan super low lux CMOS	
Minimum Illumination	Color	0.04 Lux (F1.6 AGC ON)
	B/W	0.02 Lux (F1.6 AGC ON)
Picture Elements	1920 (H) x 1080 (V)	
Shutter Speed	Auto / Manual (1/30 ~ 1/32,000 sec.)	
White Balance	Auto / Manual (2000 K ~ 10000 K)	
S/N Ratio	45 dB	
WDR	Yes	
Dynamic Range	90 dB	
Max. Speed	100 km/h (62 mph)	

### Lens

Megapixel	2 MP	
Day/Night	Yes (with removable IR-cut filter)	
Lens Type	Motorized Varifocal	
Focal Length	5.1 ~ 51 mm	
Horizontal FOV	55.2° (W) ~ 7.1°(T)	
Maximum Aperture	F/1.6	
Operation	Focus	Auto / Manual
	Zoom	10x Optical Zoom; 5x Digital Zoom
	Iris	Auto / Manual
IR LED Quantity	4 IR LEDs	
IR Distance	22 m (70 ft)	

### Operation

Video Compression	H.265, H.264, MJPEG
Video Stream	Triple streams from H.265, H.264 and MJPEG
Frame Rate	50Hz: 25 fps at 1920 x 1080, 26 ~ 50 fps at 1920 x 1080 WDR Off 60Hz: 30 fps at 1920 x 1080 (default), 31 ~ 60 fps at 1920 x 1080 WDR Off * The frame rate and the performance may vary depending on the number of connections and data bitrates (different scenes)
Maximum stream	5 connections
Image Setting	Brightness, Contrast, Saturation, Sharpness, Gamma, White Balance, Flicker-less, Image Orientation (0°, 90°, 180°, 270°), Shutter Speed, Backlight Compensation, AE Sensitivity, Denoise, Metering, 3D Noise Reduction
Audio Compression	G.711U / G.711A
Audio Support	One-way audio (external microphone required)

Digital I/O	Input	1 Input (TTL, +3 – 5V DC)	
	Output	1 Relay Output (40V DC, 300 mW / 300 mA)	
<b>Video Resolution</b>			
Main Stream	4:3	1280 x 960, 1024 x 768, 800x 600, 640 x 480, 480 x 360	
	5:4	1280 X 1024, 720 x 576	
	16:9	1920 x 1080, 1280 x 720, 640 X 360	
Sub Stream	4:3	1280 x 960, 1024 x 768, 800x 600, 640 x 480, 480 x 360	
	5:4	1280 X 1024, 720 x 576	
	16:9	1920 x 1080, 1280 x 720, 640 X 360	
Third Stream (Closed by default)	4:3	1280 x 960, 1024 x 768, 800x 600, 640 x 480, 480 x 360	
	5:4	1280 X 1024, 720 x 576	
	16:9	1920 x 1080, 1280 x 720, 640 X 360	
<b>Network</b>			
Interface	10/100 Mbps Base-T, RJ-45		
Protocol	802.1x, DHCP, DNS, FTP, FTPS, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, Multicast, NTP, RTCP, RTP, RTSPS, RTSP, SNMP, SFTP, SSL, TLS, TCP/IP, UDP		
Security Feature	<ul style="list-style-type: none"> <li>- A new ID and password are required for the first-time login</li> <li>- 802.1x authentication</li> <li>- HTTPS with SSL certificate stored within the camera</li> </ul>		
<b>Mechanical</b>			
Connector	Power	DC Jack	
	Ethernet	Ethernet (10/100Base-T), RJ-45 cable	
	Audio	1 In (Audio in wire, Mono, 1.98 Vp-p, 2.2KΩ)	
		* 1 Out (Audio out wire) not functional	
	Digital I/O	I/O Wires (1 In / 1 Out)	
	RS-485	RS-485+ / RS-485- (for recognition data output)	
	Local Storage	microSD card slot (SD/SDHC/SDXC/UHS-I, Class 10), 64 GB	
* UHS-II card types are not supported.			
<b>LPR</b>			
Min Height of License Plate Images	40 pixels		
Region of License Plate	Brazil, California (USA), Colombia, Czech, European Union, Filipino, France, Georgia (USA), Germany, Germany Border, Hungary, Israel, Italy, Latvia, Lithuania, Malaysia, Myanmar, Netherlands, Romania, Slovakia, Taiwan, Ukraine, United Kingdom, Vietnam		
Snapshot	Approximately 200,000 snapshots may be stored based on the complexity of the detection environment.		
<b>General</b>			
Operating Temperature	Startup	-20 °C ~ 55 °C (-4 °F ~ 131 °F)	
	Operation	-20 °C ~ 55 °C (-4 °F ~ 131 °F)	
Humidity	20% ~ 90% (non-condensing)		
Power Source	DC 12V, 1.08A / PoE (48V, 0.27A, IEEE 802.3af)		
Max. Power Consumption	13 W		
Dimensions	Ø 86 mm x 191 mm (Ø 3.4" x 7.5")		
Weight	0.55 kg (1.22 lb)		
Ingress Protection	IP67		
Vandal Resistance	IK10 for metal casing		
Certification	CE, FCC, RoHS, UKCA compliant		
<b>Web Interface</b>			
Installation & Management	Web-based configuration		
Firmware Upgrade	Firmware upgrade through Web Browser or Utility		
Access from Web Browser	Live View, Video Recording, Change Video Quality, Image Snapshot, Audio, Picture in Picture, Privacy Mask, Text Overlay, Digital PTZ		
Language	English, Traditional Chinese		
<b>Applications</b>			
Live Viewing	Browser (Chrome)		

LPR Management	GV-ASManager V6.1.2 or later, GV-Cloud Access Control
Software Supported	GV-VMS (V17.4.8 / V18.3.5 with patch or later / V20.0.0 or later), GV-IP Device Utility (V9.0.4 or later)

- Note:**
- For regions not previously trained, submit 30,000 images to HQ for training. For details, see Step 4 in the [technical notice](#).
  - Specifications are subject to change without notice.

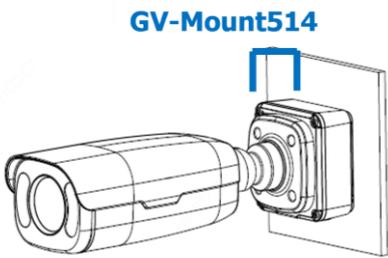
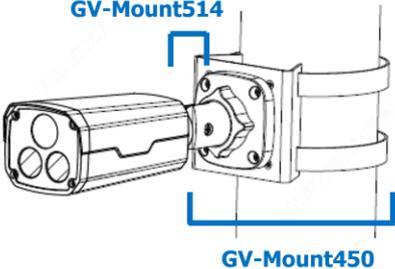
## Accessory

Model No.	Name		Details
GV-Mount450 (must be used with GV-Mount514)	Pole Mount		Dimensions: 125 x 165 x 30 mm (4.92" x 6.50" x 1.18") Weight: 0.7 kg (1.54 lb) Steel strap Diameter: $\varnothing$ 130 ~ 165 mm ( $\varnothing$ 5.12" ~ 6.5")
GV-Mount514	Junction Box		Dimensions: 132.3 x 132.3 x 51.5 mm (5.21" x 5.21" x 2.03") Weight: 0.4 kg (0.9 lb)
GV-PA191	PoE Adapter		GV-PA191 is a PoE adapter.
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.
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 desired.
Power Adapter			Contact our sales representatives for the countries and areas supported.

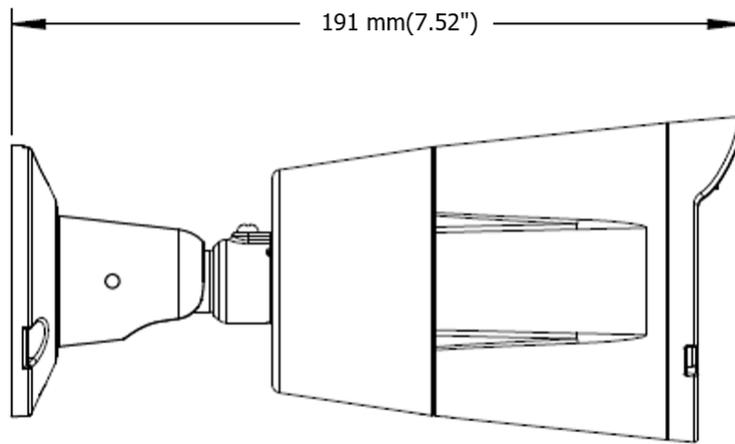
## Packing List

- GV-LPR2812-DL Camera
- Drilling Sticker
- Screw Kit
- Waterproof Rubber Set
- 64 GB microSD Card (already formatted and inserted)
- Download Guide

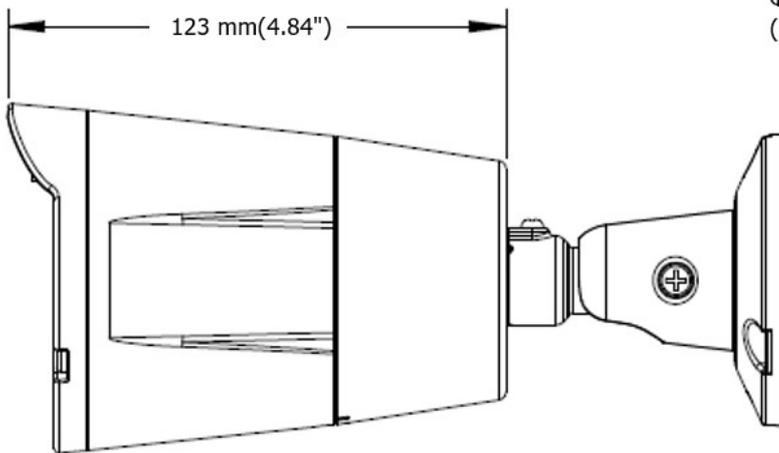
## Mounting Type

Junction Box Mount	Junction Box Mount with Pole Mount
GV-Mount514	GV-Mount514 + GV-Mount450
 <p>The diagram shows a camera lens assembly connected to a square junction box. A blue bracket labeled "GV-Mount514" is positioned above the junction box, indicating its mounting point on a wall.</p>	 <p>The diagram shows the camera lens assembly connected to a junction box, which is then attached to a cylindrical pole mount. A blue bracket labeled "GV-Mount514" is positioned above the junction box, and another blue bracket labeled "GV-Mount450" is positioned below the pole mount, indicating their respective mounting points on a pole.</p>

### Dimensions

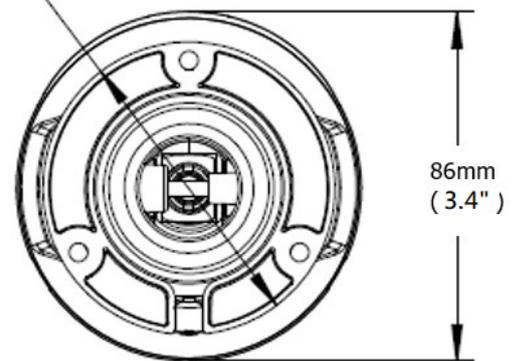


LEFT



RIGHT

Ø72mm  
(2.83")



BACK