

## **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, UKCA, LVD, RoHS compliant

### **Introduction**

GV-LPR2812-DL is capable of recognizing license plate numbers with its built-in deep learning LPR processor. GV-LPR2812-DL can compare captured license plates either with its on-the-edge standalone database, or the database stored at the GV-ASManager access control system. When there is a match, GV-LPR2812-DL can grant access for the vehicle by opening a gate or barrier.

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 it can also automatically adjust its shutter speed to the scene to capture clear license plate images in low-light settings. It adheres to IP67 and IK10 standards and can withstand temperatures ranging from -20°C (-4°F) to 55°C (131°F).



## 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)
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		- A new ID and password are required for the first-time login - 802.1x authentication - HTTPS with SSL certificate stored within the camera
<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		California (USA), Colombia, Czech, Germany, European Union, France, United Kingdom, Georgia (USA), Hungary, Israel, Italy, Lithuania, Malaysia, Netherlands, Romania, Slovakia, Taiwan, Ukraine, Vietnam, Brazil, Myanmar, Germany Border
Snapshot		Approximately 250000 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, UKCA, RoHS 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
Software Supported	GV-VMS (V17.4.8 / V18.3.5, patch files required)

**Note:** Specifications are subject to change without notice.

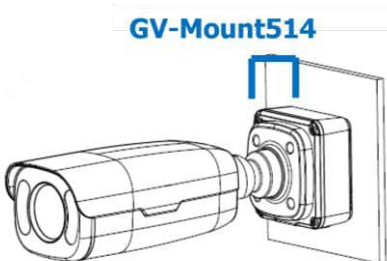
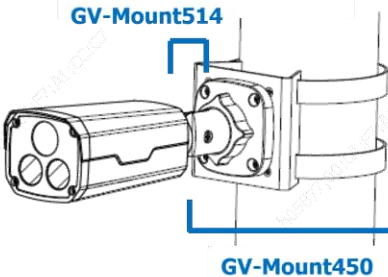
## Accessory

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: Ø 130 ~ 165 mm (Ø 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 being mounted to a wall junction box using the GV-Mount514 bracket. A blue bracket labeled 'GV-Mount514' is shown connecting the camera to the junction box.</p>	 <p>The diagram shows a camera being mounted to a pole using two brackets: GV-Mount514 and GV-Mount450. GV-Mount514 is the bracket that connects the camera to the GV-Mount450, which is then mounted to the pole. Blue brackets and labels identify each component.</p>

## Dimensions

