

## **4MP Network LPR Camera (Vari-Focal)**

N9L-4RAL



#### **Key Features**

- 4MP Bullet Housing
- 10 to 50 mm Motorized Lens
- License Plate Recognition Speed up to 60 kmh (37 mph)
- · IR Distance up to 98 ft
- ANPR with 99% Accuracy

#### **Certifications and Complaince**

- NDAA Compliant
- FCC
- IC
- UL

#### **Learn More**



Learn more about this product's key technologies.

View all compatible accessories for this product.

#### **Overview**

The **N9L-4RAL** is part of Luminys's N9 series of specialty security devices. Designed to improve operations and go beyond today's highest security standards, this LPR camera provides an efficient, cost-effective way to manage vehicle access and traffic flow at key access points.

The camera's intelligent algorithms can accurately identify vehicle details. The LPR can categorize the type of vehicle (large bus, large truck, medium truck, sedan, van, small truck, medium bus, SUV, MPV, pickup truck) and if there are front-seat occupants. LumiTrajectory captures and displays the vehicle's license plate number and path through the monitored area. The camera can recognize plates from the United States and Canada and up to 12 vehicle colors (gray, black, white, silver, blue, green, purple, red, orange, pink, brown, yellow).

The Luminys LPR Gate System can automatically manage vehicle access at both entry and exit points. The LPR (license plate recognition) feature can also be used to control gate access based on vehicle identification.

This camera is ideal for vehicle detection and identification in applications such as parking lots, community roads, toll gates, and more.

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# **Specifications**

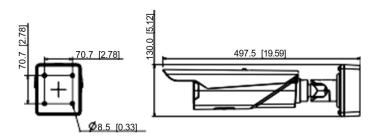
Camera	
Luminys Series	N9 Series (Specialty)
Image Sensor	1/1.8-in. 4MP Progressive CMOS
Maximum Resolution	2688 × 1520 (OSD Black Strip Excluded)
Minimum Illumination	0.002 Lux (Built-In Illuminator On)
Number of Illuminators	Six (6) IR Illuminators With Adjustable Brightness
Illuminator Control	Automatic, Manual
Maximum Illumination Distance	Up to 30.0 m (98.4 ft)
Maximum Detection Speed	60.0 km/h (37.3 ft/h)
Detection Width	6.0 m to 7.0 m (19.7 ft to 23.0 ft)
Capture Distance	8.0 m to 30.0 m (26.3 to 98.4 ft)
Trigger Mode	Video Detection, I/O Coil
Shutter Mode	Single Shutter
Electronic Shutter Speed	Automatic, Manual 1/25 s–1/10,000 s
Lens	
Lens Mount	Module
Iris Type	Automatic (W:1.33—T:1.34)
Lens Type	Motorized Vari-Focal
Focal Length	10 to 50 mm (0.4 to 2.0 in.)
Field of View	Horizontal: 40.55° (W)—9.33° (T) Vertical: 22.7° (W)—5.3° (T) Diagonal: 46.6° (W)—10.63° (T)
Video	
Compression	H.265, H.264M, H.264H, MJPEG
Image Encoding Format	JPEG
Stream Capability	Two (2) Streams
Resolution	Main Stream: 4MP (2688×1520), 2MP (1600×1200), 1080p (1920×1080), 720p (1280 × 720)
	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)
Maximum Frame Rate	<b>Sub Stream:</b> 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 ×
Maximum Frame Rate  Video Bit Rate	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704
	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps
Video Bit Rate	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps  MJPEG: 8192 to 40960 kbps
Video Bit Rate Light Balancing	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps MJPEG: 8192 to 40960 kbps  Wide Dynamic Range (96 dB)  Auto, Outdoor, Manual, Partial White
Video Bit Rate Light Balancing White Balancing	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps MJPEG: 8192 to 40960 kbps  Wide Dynamic Range (96 dB)  Auto, Outdoor, Manual, Partial White Balance, Natural, Street Lamp
Video Bit Rate Light Balancing White Balancing Exposure Mode	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps MJPEG: 8192 to 40960 kbps  Wide Dynamic Range (96 dB)  Auto, Outdoor, Manual, Partial White Balance, Natural, Street Lamp  Manual, Auto  3D NR, Video 3D NR, Video Spatial 3D
Video Bit Rate Light Balancing White Balancing Exposure Mode Noise Reduction	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps MJPEG: 8192 to 40960 kbps  Wide Dynamic Range (96 dB)  Auto, Outdoor, Manual, Partial White Balance, Natural, Street Lamp  Manual, Auto  3D NR, Video 3D NR, Video Spatial 3D NR, Video Temporal 3D NR
Video Bit Rate Light Balancing White Balancing Exposure Mode Noise Reduction Edge Enhancement	Sub Stream: 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240)  Main Stream: 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps Sub Stream: 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps  H.264/H.265: 4096 to 10240 kbps MJPEG: 8192 to 40960 kbps  Wide Dynamic Range (96 dB)  Auto, Outdoor, Manual, Partial White Balance, Natural, Street Lamp  Manual, Auto  3D NR, Video 3D NR, Video Spatial 3D NR, Video Temporal 3D NR  Supported  Time, Plate, Vehicle (Color, Type) Vehicle Position, Counterfeit, Checkpoint

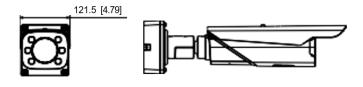
Analytics	
Vehicle Detection Rate	≥ 99%
Vehicle Recognition Rate	≥ 95%
Vehicle Recognition Attributes	Vehicle Color, Front-Seat Passenger, Licensed/Unlicensed
LumiTrajectory	Displays Plate and Vehicle Path
Audio	
Interface	Output: One (1) Channel (RCA port)
Alarm	
Event	No SD Card, Insufficient Memory, SD Card Error, Offline, IP Conflict, Illegal Access, Security Exception
Interface	Input: 2-Channel Optocoupler (On/Off) Output: 2-Channel Relay (Can Be Used to Connect Other Devices)
Network	
Interface	One (1) RJ-45 (100/1000 Mbps Ethernet) Port, Two (2) RS-485 Ports, One (1) Wiegand Channel
Interoperability	ONVIF (Profile S/T), CGI, SDK
Auto Registration	Supported
Security	Username/Password, MAC Address Binding, HTTPS Encryption, IEEE 802.1× Network Access Control
Automatic Network Replenishment (ANR)	Supported via Platform/FTP
Strorage	Built-In 1 TF Card Port (Max. 128 GB)
Electrical	
Power Supply	12 VDC, PoE+
Power Consumption	< 20 W
Construction	
Net Weight	3.2 kg (7.05 lb)
Gross Weight	5.2 kg (11.46 lb)
Operating Temperature	-30 to 65 °C (-22 to 149 °F) 10 to 90% RH (Non-Condensing)
Protection Ratings	IP67
Product Dimensions (L × W × H)	497.4 × 121.6 × 130.0 mm (19.6 × 4.8 × 5.1 in.)
Packaging Dimensions (L × W × H)	625.0 × 305.0 × 270.0 mm (24.6 × 12.0 × 10.6 in.)
Installation	Wall, Pole, or Ceiling Mount
Material	Metal and Plastic
Certifications and Co	mpliance
Certifications	FCC, UL, IC
Compliance	NDAA



#### **Dimensional Drawing**

mm [in.]





### **Compatible Accessories**

Below are the compatible accessories combinations for this product. All SKUs listed must be purchased to complete an accessory combination. For more information and to see mounting combinations, please view our accessory selector at <a href="https://www.luminyscorp.com/products/accessories">https://www.luminyscorp.com/products/accessories</a>.

<b>Accessory Combination</b>	SKU(s)	Description
Pole Mount	P01	Pole Mount Bracket