

# 4MP Network LPR Camera (Vari-Focal)

## N9L-4RAL



### Key Features

- 4MP Bullet Housing
- 10.0 to 50.0 mm Motorized Lens
- Maximum License Plate Recognition Speed: 80.5 km/h (50.0 mi/h)
- Maximum IR Illumination Distance: 30.0 m (98.4 ft)
- ANPR With 99% Accuracy

### Certifications and Compliance

- NDAA Compliant
- FCC
- IC

### 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.

# 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       | 80.5 km/h (50.0 mi/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<br>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 | <b>Horizontal:</b> 40.55° (W)–9.33° (T)<br><b>Vertical:</b> 22.7° (W)–5.3° (T)<br><b>Diagonal:</b> 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                 | <b>Main Stream:</b> 4MP (2688×1520), 2MP (1600×1200), 1080p (1920×1080), 720p (1280 × 720)<br><b>Sub Stream:</b> 720p (1280 × 720), 960H (960× 480), D1 (704 × 480), CIF (352 × 240) |
| Maximum Frame Rate         | <b>Main Stream:</b> 2688 × 1520/1600 × 1200/1920 × 1080/1280 × 720 at 30 fps<br><b>Sub Stream:</b> 1280 × 720/960 × 480/704 × 408/352 × 240 at 30 fps                                |
| Video Bit Rate             | <b>H.264/H.265:</b> 4096 to 10240 kbps<br><b>MJPEG:</b> 8192 to 40960 kbps                                                                                                           |
| Light Balancing            | Wide Dynamic Range (96 dB)                                                                                                                                                           |
| White Balancing            | Auto, Outdoor, Manual, Partial White Balance, Natural, Street Lamp                                                                                                                   |
| Exposure Mode              | Manual, Auto                                                                                                                                                                         |
| Noise Reduction            | 3D NR, Video 3D NR, Video Spatial 3D NR, Video Temporal 3D NR                                                                                                                        |
| Edge Enhancement           | Supported                                                                                                                                                                            |
| OSD Overlay                | Time, Plate, Vehicle (Color, Type) Vehicle Position, Counterfeit, Checkpoint Direction, Trigger Source, Custom                                                                       |
| Image Tampering Prevention | Watermark, Verification Function                                                                                                                                                     |

## 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 | <b>Output:</b> One (1) Channel (RCA port) |
|-----------|-------------------------------------------|

## Alarm

|           |                                                                                                                       |
|-----------|-----------------------------------------------------------------------------------------------------------------------|
| Event     | No SD Card, Insufficient Memory, SD Card Error, Offline, IP Conflict, Illegal Access, Security Exception              |
| Interface | <b>Input:</b> 2-Channel Optocoupler (On/Off)<br><b>Output:</b> 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 802.1x, Network Access Control |
| Automatic Network Replenishment (ANR) | Supported via Platform/FTP                                                                    |
| Storage                               | 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)<br>10 to 90% RH (Non-Condensing) |
| Protection Ratings               | IP67                                                          |
| Product Dimensions (L × W × H)   | 497.4 × 121.6 × 130.0 mm<br>(19.6 × 4.8 × 5.1 in.)            |
| Packaging Dimensions (L × W × H) | 625.0 × 305.0 × 270.0 mm<br>(24.6 × 12.0 × 10.6 in.)          |
| Installation                     | Wall, Pole, or Ceiling Mount                                  |
| Material                         | Metal and Plastic                                             |

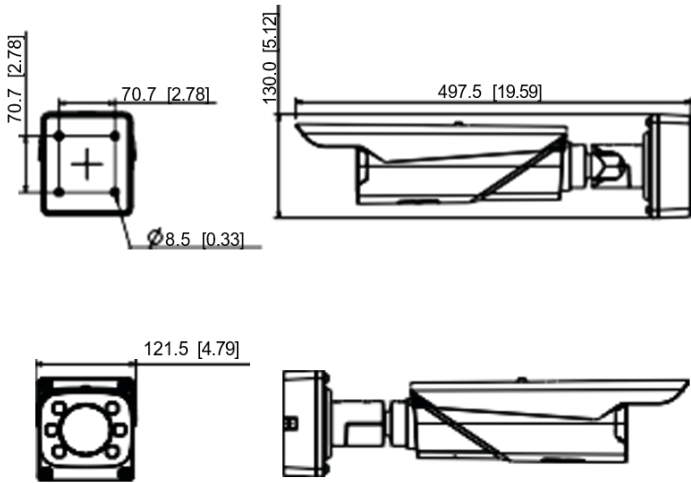
## Certifications and Compliance

|                |         |
|----------------|---------|
| Certifications | FCC, 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 <https://www.luminyscorp.com/products/accessories>.

| Accessory Combination | SKU(s)  | Description        |
|-----------------------|---------|--------------------|
| Pole Mount            | LUM-P01 | Pole Mount Bracket |