



## V2008-WNL-LPR Roughneck Pro License Plate Recognition Box Camera

V2008-WNL-LPR  
Order as a standalone box camera, or in  
a kit that also includes lens and housing



HPOE-100



V12-50VF-P



NDA-Compliant



### Overview

The Vicon Roughneck® Pro License Plate Recognition (LPR) Camera lets you capture, store and search on an unlimited number of license plates, and examine details like vehicle color, make, and model in impressive 8 MP detail—all from a single camera. This solution is ideal for single-lane, stop-and-go applications, such as drop-off/pick-up lines, gated entrances, stop-and-go toll booths, and drive-thrus.

#### See all the details for accurate identification

Thanks to the camera's Starlight low-light color imaging, you'll see vivid colors and sharp details in the dark, which would be overlooked in traditional IR black-and-white images offered by some other LPR cameras.

#### Heavy-duty camera with embedded LPR

The camera features all of the benefits of Vicon's traditional [Roughneck Pro Box camera](#). The LPR version is offered as a kit that includes a housing and a lens, or as a standalone camera where you can source your housing and lens of preference. The LPR analytic is embedded directly on the camera, for a more economical solution that doesn't degrade server performance or compromise bandwidth. Having the LPR analytic at the edge also allows for a standalone (camera-only) LPR solution for users who are not integrated with Vicon's Valerus™ VMS.

### Product at a Glance

- ▶ 8 MP resolution provides display of vehicle details such as decals, plate expiration dates, and body damage
- ▶ LPR software embedded on the camera increases server performance and bandwidth
- ▶ Create customized lists of license plates that will generate an alert (as well as a number of other actions) upon a vehicle's entry
- ▶ On screen alarm handling procedures provide step-by-step instructions for proactively addressing alarms
- ▶ Fast and accurate setup accounts for vehicle speed and camera height/position/distance
- ▶ Supports license plates from over 70 countries
- ▶ Search by plate for faster and easier investigations

## Specifications

Camera	
Image Sensor:	1/1.8 inch
Max Resolution:	3840 x 2160 (8 MP)
Image Settings:	Digital image effects: defog, flip and mirror. Configurable brightness, contrast, saturation, hue, sharpness. White balance. Backlight Compensation (BLC). HLC. Gain control. Gamma correction. Electronic shutter speed. Day/night mode. Dynamic Noise Reduction (3 DNR). Motion detection (4 programmable zones). Privacy masking (8 masks). Dynamic ROI. Event notification.
Intelligent Video Analytics:	Motion, Tampering/Defocus, Intrusion, Loitering, Line Cross/Counting, Object Left/Removed, Area Counting, Wrong Direction
Electronic Shutter Speed:	Auto (1/2 ~ 1/10,000 sec), manual
Day/Night Performance:	True day/night (IR cut filter)
Wide Dynamic Range (WDR):	True WDR (120 dB)
Minimum Illumination:	Color: 0.02 lux; BW: 0.01 lux
Lenses	
Lens Type:	CS/i-CS mount
Iris Control:	DC iris, P-Iris, i-CS support
Focus Control:	Auto Back-focus button for easy focus adjustment
Network Video Transmission	
Network:	10/100Base-T/TX, RJ-45
Image Compression:	H.265/H.264 and M-JPEG
Resolution:	8 MP: 3840x2160, 3264x1840, 2592x1944, 2688x1520, 2048x1536, 1920x1080 (1080P), 1280x960/720, 800x600, 640x480, 640x360, 320x240
Protocol:	ARP, DHCP, DNS, FTP, HTTP, HTTPS, HLS, ICMP, IGMP, IPv4/6, LDAP, NTP, RTSP/RTCP/RTP, RTMP, QoS, SMTP, SNMP v1/2c/3, TCP, TLS/TLS, UDP, UPnP, 802.1X, UPnP, Bonjour, DDNS, PPPoE; ONVIF S/G/Q/T
Frame Rate:	Max. 30 fps (25 fps, PAL)
Streams:	Triple streaming. Single: 8 MP@30fps; Dual: 8 MP@30fps + 640x480@30fps; Triple: 8 MP@30fps + 640x480@30fps + 320x240@30fps
Audio:	1 audio input/1 audio output; G.711 (a-law, $\mu$ -law); audio level alarm
Alarm:	1 alarm input/1 alarm output
Users:	Live: 10 users
Web Browser:	Internet Explorer®; Safari®, Firefox®, Google Chrome®, Microsoft® Edge
Security:	IP address filtering, HTTPS encrypted data transmission, SSL, IEEE 802.1X, Digest Authentication, Advanced Security
Local Recording:	Micro-SD slot provided; SDHC/SDXC card supplied.
Mechanical	
Construction:	Box housing: aluminum alloy. Front case: PC + ABS.
Camera Angle Adjustment:	Mount dependent; 1/4-20 threaded hole top and bottom for mounting
Dimensions:	2.9 in. (73 mm) (W) x 2.4 in. (62 mm) (H); x 4.1 in. (104 mm) (L); refer to dimensional diagram
Weight:	1.3 lb (0.6 kg)

## Specifications

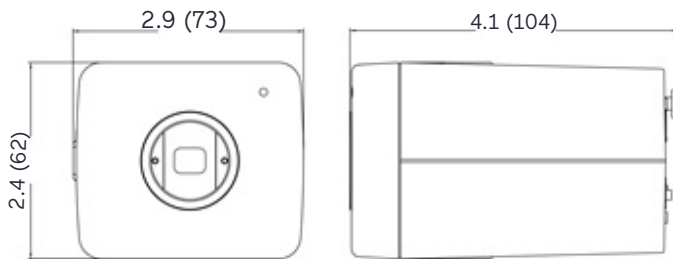
Electrical	
Input Power:	PoE (IEEE 802.3af, Class 3); 12 VDC ( $\pm 10\%$ ); 24 VAC (+20%/-10%)
Current (IR on):	1.125 A @12 VDC; 0.56 A @24 VAC; 0.28 A @PoE
Power Consumption:	PoE: 13.5 W.
Controls and Connectors	
Connectors:	Pigtail cable provided; optional backbox required for cabling. Power: 12 VDC/24 VAC: terminal block. Network/PoE: RJ-45 CAT 5. Alarm Input/Output: terminal block. Audio In/Out: screw terminal. Reset button. Default button. Micro SD card slot for SDHC/SDXC card (supplied).
SD Card:	32 GB card supplied. Requirements: Class 10; read speed: 100 MB/sec; write speed: 60 MB/sec.
Environmental	
Operating Conditions:	Outdoor rated Temp: -40° to 140° F (-40° to 60° C) Humidity: up to 90%, relative, non-condensing
Approvals:	UL, FCC Class A, CE, IP67, IK10; ONVIF Profile: S/T/G/Q; RoHS
Country of Origin:	Taiwan
Warranty:	5 years
Operational	
Region of Interest:	Provides calibration pattern for easy setup
Lists:	Standard White List, Black List and Custom lists; 50 user defined lists, including the 4 pre-defined lists. Schedules and rules management for each list. 10,000 max plates per list.
List Synchronization:	Yes
Event Responses:	Valerus; Alarm Out; FTP
Event Logs:	Search capabilities with captured image and plate thumbnail
Customize Storage Options:	Yes
Number of Events on SD Card:	Up to 800,000 events on 32 GB card included (25,000 events/GB)
Recognition Rate:	95%-99%, depending on country and installation conditions
Direction Detection:	Yes
Recommended Installation Parameters	
Vehicle Speed:	15 mph (20 km/hr) max
Detection Time:	100 - 1000 ms
Character Height:	Pixels: 13 min; 25 recommended
Target Distance:	6.6 - 19.7 ft (2 - 6 m)
Maximum Horizontal/Vertical Angle:	35° max; 20° recommended/35° max; 20° recommended
Lane Coverage:	Two max; 1 recommended
Application:	Low-speed vehicle entry/exit

## Ordering Information

Model Number	Description
V2008-WNL-LPR	8 MP box camera; no lens, CS/i-CS accepted; embedded LPR software
V2008-W1250-LPR	Includes V2008-WNL-LPR, V12-50VF-P lens and HPOE-100 housing
Lenses and Housing*	
V12-50VF-P	12 - 50 mm focal length; CS mount; IR optics; P-iris
HPOE-100	Vandalproof outdoor housing with built-in PoE management and IR LEDs
HPOE-PA	Pole mount adapter option; fits 2.75 - 9 in. (70 - 230 mm) diameter poles

\*Refer to datasheet for the lenses and housing for details.

## Dimensional Drawing [in. (mm)]



[V12-50VF-P](#)



[HPOE-100](#)



HPOE-PA

## Available LPR Solution Options

### LPR Kit (V2008-W1250-LPR)

The kit consists of a box camera with the LPR analytics loaded, a lens, and a housing.



### LPR Standalone Camera (V2008-WNL-LPR)

The camera comes with the LPR analytics loaded on it, but no lens or housing. Users can source their lens and housing of preference.



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