

V2008B-W310LPR/V2008B-W818LPR

Roughneck AI License Plate Recognition Bullet Camera



Overview

The Vicon Roughneck® AI 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 AI Bullet Camera**, which make it ideal for LPR applications, e.g., a guaranteed water-tight seal, a wider temperature range, adaptive IR, and a dual heater system for better de-fogging. Then it embeds the LPR analytic 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

Model	V2008B-LPR
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, Tailgating, Object Left/Removed, Crowding. Museum Search.
Electronic Shutter Speed:	Auto (1/2 ~ 1/10,000 sec), manual
Day/Night Performance:	True day/night (IR cut filter)
Wide Dynamic Range	True WDR (120 dB)
Minimum Illumination:	Color: 3.6-10 mm: 0.02 lux or 8-18 mm: 0.01 lux. BW: 0.01 lux, IR Off; 0 lux (IR On).
IR Distance:	Smart IR/Adaptive IR: 131 ft (40 m); 4 IR LEDs
Dual Heater System:	For low temperature operation: heater turns on at -40° F (-40° C) and off at 59° F (15° C). For defog operation: heater turns on at -40° F (-40° C) and off at 140° F (60° C).
Lenses	
Focal Length:	3.6-10 mm; 2.8X optical zoom or 8-18 mm; 2.25X optical zoom
Max. Aperture:	3.6-10 mm: f/1.5 - f/2.8 or 8-18 mm: f/1.6-f/2.8
Iris:	P-Iris (Manual/Auto)
Zoom/Focus Adjust:	Motorized zoom and focus
Field-of-View:	3.6-10 mm: Horizontal: 46° (tele) - 98° (wide); Vertical: 26° (tele) - 54° (wide) or 8-18 mm: Horizontal: 25° (tele) - 60° (wide); Vertical: 12° (tele) - 33° (wide)
Network Video Transmission	
Network:	10/100Base-T/TX, RJ-45
Image Compression:	H.265/H.264 and M-JPEG
Resolution:	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/TTLS, 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 (line in/out); G.711 (a-law, μ-law); audio level alarm
Alarm:	1 alarm input/1 alarm output
Users:	Live: 10 users
Web Browser:	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:	Housing: White aluminum. Sunshield: PC + ABS.
Camera Angle Adjustment:	Adjusted using integral wall mount. Mechanical camera adjustment pan/tilt.
Mounting:	Surface mounting: wall or ceiling; refer to ordering information for mounting options
Dimensions:	3.5 in. (89 mm) (Diam) x 10.3 in. (261 mm) (L); refer to dimensional diagram
Weight:	4.0 lb (1.8 kg)

Specifications

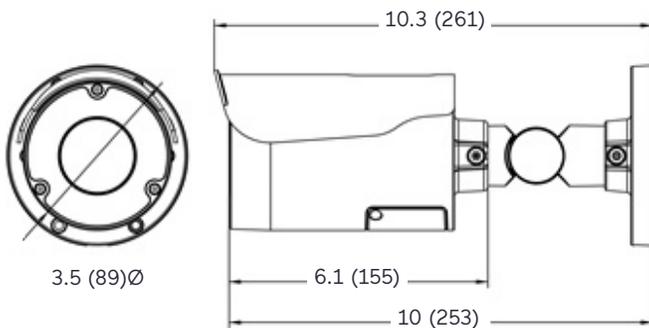
Model	V2008B-LPR
Electrical	
Input Power:	PoE+ (IEEE 802.3at, Class 4); 12 VDC ($\pm 10\%$); 24 VAC (+20%/-10%)
Current (IR on):	1.64 A @12 VDC; 0.82 A @24 VAC; 0.41 A @PoE
Power Consumption:	IR/Heaters On: 19.68 W. IR Heaters Off: 12.48 W.
Controls and Connectors	
Connectors:	Pigtail cable provided; 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 (32 GB, 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°) Humidity: up to 90%, relative, non-condensing
Approvals:	UL, FCC Class A, CE, IP67, IK10 (including front glass); 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 Allow List, Block 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:	3.6-10 mm: 6.6 - 19.7 ft (2 - 6 m); 8-18 mm: 16 - 36 ft (5 - 11 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	Description
V2008B-W310LPR	8 MP bullet camera with 3.6-10 mm motorized autoiris lens; embedded LPR software; SD card included
V2008B-W818LPR	8 MP bullet camera with 8-18 mm motorized autoiris lens; embedded LPR software; SD card included
Accessories	
V2000B-PLATE 	Adapter Plate: Allows the V2008B-LPR models to be mounted on a 4x4 electrical box
V2000B-BOX 	Backbox: For ease of cabling; compatible with V-24CMB-4 corner mount and V-20B-A-4 pole mount adapter

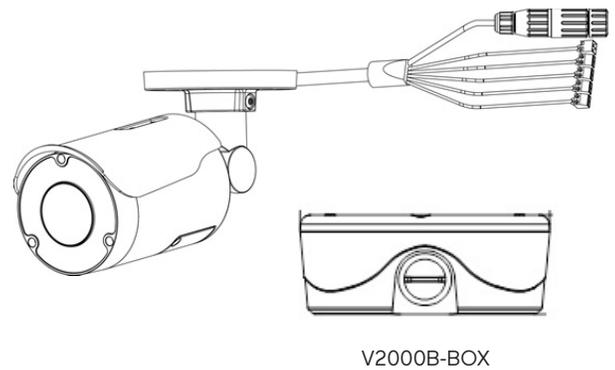
Dimensional Drawing

[in. (mm)]



Pigtail Cable

Use optional V2000B-BOX (sold separately)



Data Sheet Number: V318-45-02
 Vicon Data Sheet Number: 8009-7318-45-02

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