



REAPERHD MOBILE LPR CAMERA SYSTEM

DEPLOYABLE ON ANY VEHICLE. INTUITIVE FOR ANY DRIVER.

Create added awareness on the road. The ReaperHD Mobile License Plate Recognition (LPR) Camera System is a complete solution that can be deployed on any vehicle in your fleet and easily operated by any driver. It enables your team to receive real-time alerts, conduct comprehensive searches and, paired with Vigilant PlateSearch or Vigilant ClientPortal, leverage advanced analytics and parking tools to uncover new vehicle location insights that protect communities and generate revenue.

KEY BENEFITS

Detect As You Drive

Deploy a purpose-built LPR camera system, configured for your needs and optimized for mobility – to go where you go.

Rely On Better Basics

Beyond ensuring you've captured the best data, we make management, alerting and searching straight-forward.

Do More With More Data

Use patented analytics and access to billions of detections to derive new intelligence and more valuable insights.



REAPERHD MOBILE LPR CAMERA

High definition, low profile and with various mounting options, our ReaperHD mobile LPR camera can capture nearly 60 scans per second for analysis, even in the most extreme environment.



CAMERA PERFORMANCE

Part Number	Optimal Focal Length	Capture Range
VSR-42-925	75 ft / 22.9 m	55-80 ft / 16.8-24.2 m
VSR-42-916	34 ft / 10.4 m	20-55 ft / 6.1-16.8 m
VSR-42-912	24 ft / 7.3 m	13-48 ft / 4.0-14.6 m
VSR-42-908	16 ft / 4.9 m	8-36 ft / 2.4-11.0 m
VSR-42-906	12 ft / 3.7 m	6-24 ft / 1.8-7.3 m

OPTICS

Window	Shatterproof window
Resolution	1.51 - 2 MP
Capture speed maximum	150 mph (241 kph)

HOUSING

Size	W 6.9 / L 3.9 / H 2 in (W 175 / L 98.5 / H 52 mm)
Fixed mounting	3-axis (aim precision) lock in place, low profile, solid mount, and sun shield
Color	Matte black
Weight	2.2 lbs / 1 kg

ENVIRONMENTAL

Environmental protection	IP67 / NEMA4 compliant
Operational temperature	-40°F to 140°F (-40°C to 65°C)
Connector	IP67 rated RJ45 female

ELECTRICAL

Power consumption	15W nominal, 25W max
Input voltage	POE+ (IEEE802.3 at PD)

CABLE MANAGEMENT

Cable length	Up to 328 ft (100 m)
Type	Cat6 STP 22-24 AWG
Connector	IP67 RJ45 male connector (camera end); RJ45 male (injector end)

VLP COMMUNICATIONS BOX

The VLP Comms Box combines processing and power in a durable, ruggedized enclosure that is equipped with an all-in-one built-in processor with GPS and PoE for up to four cameras.



SYSTEM

CPU	Intel Gen8 Core i7-8700T (12M Cache 2.4GHz up to 4.0GHz)
Memory	2 x 8GB DDR4 2400 MHz SO-DIMM
LAN Chipset	9 x Intel i210-AT and 1 x i219 (iAMT9.5 w/ i5, i7 only) Gb/s Ethernet Controllers Onboard Support PXE and WOL

I/O

Serial Port	3 x RS 232/422/485 (Auto Direction Control)
USB Port	4 x USB 3.0 Ports
LAN	10 x RJ45 Ports for GbE (Optional for M12 connector and 8 x PoE total Max. 120W)
Video Port	3 x DP Ports
Wi-Fi Adapter	802.11n/g/b
4G LTE / GPS	Sierra Wireless EM7511-Dual Sim Support

POWER REQUIREMENT

Power Input	12V DC
Power Protection	Automatic Recovery - Short Circuit Protection
Power Management	Remote/Ignition connection to toggle power
Power Off Control	Power off Delay Time Setting by BIOS and Software

SOFTWARE

Operating System	Ubuntu 18.04 64bit
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GRAPHICS

Graphics	Intel® UHD Graphics 630
Resolution	Max Resolution (DP) : 4096x2304@60Hz

STORAGE

Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD RAID 0, 1, 5 1 x mSATA
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ENVIRONMENTAL

Operating Temp.	-40°C ~ 70°C, ambient w/ 0.6m/s airflow
Storage Temp.	-40°C ~ 80°C
Relative Humidity	10% RH – 90% RH (non-condensing)
Vibration (random)	EC60068-2-64, random, 2.5G@5-500Hz, 1hr/axis with SSD
Vibration Operating	MIL-STD-810G, Method 514.6, Procedural, Category 4
Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
Certifications	CE, FCC Class A, E13

MECHANICAL

Construction	Polycarbonate
Mounting	Wall or pole mount
Weight	5190g
Dimensions	260(L) x 250(W) x 95(H) mm

VIGILANT CARDETECTOR MOBILE

Vigilant CarDetector Mobile in-car system software alerts drivers when a license plate on a hot list is scanned, can be used to search plates as well as manage systems.



HARDWARE	MINIMUM REQUIREMENTS	RECOMMENDED REQUIREMENTS
Processor	Intel Core i3-8145U @ 2.10GHz (or 3,847+ PassMark Score)	Intel Core i7-3632QM Processor (6M Cache, up to 3.20 GHz) (or 6,929+ PassMark Score)
Memory	8 GB RAM	16 GB RAM
Hard Drive	256 GB SATA III SSD Drive @ 550 Mbps Read/Write Speed	500 GB M.2 SSD Drive @ 550 Mbps Read/Write Speed or higher

SOFTWARE	MINIMUM REQUIREMENTS	RECOMMENDED REQUIREMENTS
Operating System	MS Win 7 (Professional Version - 64 Bit)	MS Win 10 (Professional Version – 64 bit)

NETWORK	MINIMUM REQUIREMENTS	RECOMMENDED REQUIREMENTS
Ports Utilized	TCP 2000, 3000, 4000, 5000 (LAN /DSP)	TCP 2000, 3000, 4000, 5000 (LAN /DSP)
	TCP Port 3310 (Internal for database)	TCP Port 3310 (Internal for database)
	TCP Port 80, 443, 8888 (Wireless to LEARN)	TCP Port 80, 443, 8888 (Wireless to LEARN)
Network Card	1.0 Gbps	1.0 Gbps
Internet	3G	4G

Please Note: The above charts reflect MDC configurations for use with the VLP communications box and up to a 4-camera LPR system.



VLS MOBILE TABLET (OPTIONAL)

The VLS Mobile Tablet is cost efficient, compact and rugged, with a built in processor that supports up to three LPR cameras¹ and GNSS, along with Vigilant CarDetector Mobile without the need for deploying the VLP Communications Box.



SYSTEM	
CPU	Intel® 8th Generation Core™ i7 quad-core processor
RAM	16GB
Storage	256GB
Operating System	Microsoft® Windows® 10 IoT Enterprise
NIST Compliance	NIST compliant BIOS
Display	10.1" LED backlight, high-brightness (800 nits) screen with capacitive multi-touch, outdoor viewable
Display Resolution	1920 x 1200
Network Interface	Wi-Fi 802.11ac, 2.4GHz/ 5GHz dual band; Bluetooth 4.2 LE
Fan/ Fanless	Fanless
Control Switch and Buttons	1 power button, 3 programmable buttons, RF switch
Indicator	1 power/battery status LED
Microphone	Built-in microphone with DSP for real-time video
Speaker	Built-in speaker

I/O PORTS	
USB Port	1 (USB 3.0)
Audio Jack	1 (3.5mm)
DC-in	1
Smart Card/CAC Reader	Full slot, reads ISO 7816 T=0, T=1; 1.8/3/5V smart card

MECHANICAL AND ENVIRONMENTAL	
AC/DC Adapter	Input: 100 – 240V AC; Output: 19V DC, 3.42A
Battery Pack	Hot swappable battery, 11.4V, 5400mAh Hot swappable battery, 11.4V, 8000mAh (optional)
Enclosure	ABS + PC plastics and magnesium-aluminum alloy
Protective Bumpers	Rubber bumpers on each corner for handling protection
Dimensions (H x W x D)	7.8 x 11 x 0.86 in/ 198 x 280 x 21.9 mm
Weight	3.1 lbs/ 1.4 kg
Durability	IP65, MIL-STD-810G and MIL-STD-461F certified
Regulatory	FCC Class B, CE, RoHS compliant
Temperature	Operation*: -20°C to 60°C (-4°F to 140°F); tested under MIL-STD-810G method 501.6, Procedure II, and method 502.6, Procedure II
Storage*	-55°C to 70°C (-67°F to 158°F)
Humidity	0% – 90% non-condensing

*For battery safety and optimal functionality and performance, the recommended usage temperature range is from -10°C to 45°C (14°F to 113°F)

MAJOR OPTIONS SPECS	
Barcode Scanner	2D barcode scanner; reads 1D also
Camera	8 megapixel back camera with auto focus, white balance, gain control and exposure control
GNSS Module	U-blox M8 GNSS module with concurrent reception of GPS and GLONASS, industry leading -167dBm navigation sensitivity
Mobile Broadband	4G module for LTE, HSPA+, GSM/GPRS/EDGE, EV-DO, Rev A and 1xRTT

1. Three cameras only for low speed, low volume operation, two cameras are recommended for higher speed, higher volume environments. Please consult with your Motorola Solutions representative to determine what will work best for you.

SYSTEM ACCESSORIES

VEHICLE BRACKETS

Vehicle Make/Model	Vehicle Year	Roof Mount – Part #	Trunk Mount – Part #	Hood Mount – Part #
Chevrolet Tahoe	2006-14	K-U-R-TAHOE-06-SET		
Chevrolet Tahoe	2015+	K-U-R-TAHOE-SET	K-U-T-CAP-SET	
Chevrolet Caprice	ALL	K-U-R-CAP-SET		
Dodge Charger	2011+	K-U-R-CHGR11-SET	K-U-T-CHGR11-SET	
Dodge Charger	2005-2010	K-U-R-CHGR-05-10-SET	K-U-T-CHGR-05-10-SET	
Ford Crown Victoria	ALL	K-U-R-CVIC-SET	K-U-T-CVIC-SET	K-U-H-CVIC-SET
Ford F-150	2014+	K-U-R-F150-14-SET		
Ford Transit	2016+	K-U-R-TRANS-SET		
Ford Escape	ALL	K-U-R-ESC-18-SET		
Ford Interceptor – Sedan	ALL	K-U-R-INTSDN-SET	K-U-T-INTSDN-SET	
Ford Interceptor – SUV	2013-2019	K-U-R-INTSUV-SET		
Ford Interceptor – SUV	2020+	K-U-R-INTSUV-20-SET		

LIGHTBAR BRACKETS

Lightbar Mfg or Universal	Style	Lightbar Mount – Part #
Federal Signal	Valor-Complete Set	VS-LBB-FS-VBAR-02-A
Federal Signal	Valor w/ TD Relocation Kit-Complete Set	VSS-LBB-FS-VBAR-02-DKIT
Universal	Single Bracket- Compatible w/ most Whelen/Code3	VS-LBB-01-E
Universal	Complete Set- Compatible w/ most Whelen, Code3, TOMAR, Federal Signal, Arjent S2	VS-LBB-02-E

UNIVERSAL MOUNTS

Style	Universal Mount – Part #
Magnet Mount	U-BASE-SET
Push Bumper	K-PB-HD-SET
Ram Ball Set (Trailers and Covert)	CAM-HITCH-SET
Universal Camera Bracket	CAM-MOUNT-FLAT-ASSY-SET

For more information,
visit motorolasolutions.com/contactus



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