

Reaper ANPR / LPR Camera

Key Features

- Single cable Power-over-Ethernet installation
- Low-profile, Compact, Dual-lens (infrared and color) ANPR / ALPR Camera with integral processor
- Low power consumption at <8W average
- Automated speed calculation
- Outdoor rated, IP67, NEMA4
- Full-featured and well documented API
- Dynamic LPR camera control via Ethernet
- Point Control (aim precision)

Product Description

Vigilant Solutions' Reaper Series camera is a low-profile, compact, ANPR / LPR camera and integrated processing unit for use in both mobile and fixed LPR applications. The Reaper is environmentally sound (IP67) and friendly (<8W average power), easy to install and deploy (single PoE cable), and feature rich (direct connection to LEARN, on board 4GB memory storage of up to 80,000 detections, ONVIF compliant video stream).

Specifications

Camera Performance	
Part#	Nominal Focal Length
VSR-2X-975	65 ft / 19.8 m
VSR-2X-950	43 ft / 13.1 m
VSR-2X-935	31 ft / 9.4 m
VSR-2X-925	20 ft / 6.1 m
VSR-2X-916	14 ft / 4.3 m
	Capture Range
	54-65 ft / 16.5-19.8 m
	27-43 ft / 8.2-13.1 m
	19-31 ft / 5.8-9.4 m
	13-20 ft / 4.0-6.1 m
	10-14 ft / 3.0-4.3 m
<i>"X" in part number is "0" for regions with infrared reflective plates (most common); "5" for regions with non infrared reflective plates. Part numbers listed are for black cameras. Above distances may vary depending on plate mounting, and also for horizontal/vertical angles > 00</i>	
Capture speed maximum	120mph (190kph)
Optics	
Window	Shatterproof window
Sensor	1/3" CMOS
Housing	
Size (WxLxH)	6.9 x 6.5 x 2 in / 175 x 165 x 51 mm
Mounting – Mobile/Fixed	3-axis (Aim Precision) / Lock in place Low profile / Solid mount
Color	Matte Black or Grey
Weight	3.5 lbs / 1.6 kg
Environmental	
Environmental Protection	IP67 / NEMA4 compliant
Operational temperature	-40°C to 60°C -40°F to 140°F
Connector	M12 8 pin X-coded female circular connector
Electrical	
Power consumption	Less than 8 W nominal; 12 W MAX
Input voltage	POE+ (IEEE802.3at PD)
Engine crank (mobile deployment)	Operational during vehicle start-up at 6V (100 ms) voltage dip, 10V (2 sec)
Cable Management	
Cable length	Up to 328 ft (100 m)
Type	Cat5e or Cat6
Connector	M12 8 pin X-coded male connector (camera end) RJ45 (injector end)

Product Image



Photo: Anaheim, California USA

Reaper Platform Details

Reaper programmability is provided by a Texas Instruments DaVinci ARM Cortex-A8 RISC CPU (Linux) with Neon extension, TI C674x VLIW floating-point DSP core, and high-definition video and imaging coprocessors. The ARM lets developers keep control functions separate from A/V algorithms programmed on the DSP and coprocessors, thus reducing the complexity of the system software.

Embedded High-Performance DaVinci Video Processors

- 1-GHz ARM® Cortex®-A8 RISC Core (Linux OS)
- 750-MHz C674x™ Texas Instruments Digital Signal Processor (DSP)

Processor Core – Camera Sensor Connection

- Neon™ Multimedia Architecture • Parallel Connection for Raw Video
- Jazelle® RCT Image Sensor Interface (ISIF) for Handling Image and Video Data From the Camera
- Resizing infrared Image and Video scale 1/16x post ANPR for low network output (Broadband)
- Two 165-MHz embedded processors, 2-channel HD Video Capture (up to 5M pixel raw frame)
- Dual (2) channel 30 frame per second raw video format into input buffer

The rich peripheral set provides the ability to control external peripheral devices and communicate with external processors. For details on each of the peripherals, see the related sections in this document and the associated peripheral reference guides. The peripheral set includes:

- HD Video Processing Subsystem
- Dual Port Gigabit Ethernet MACs (10/100/1000 Mbps) IEEE 1588 Time-Stamping Protocols
- Parallel Camera Interface (CAM)
- Aptina Global Shutter Monochrome Sensor (Infrared)
- Aptina Rolling Shutter Color Sensor (Visible light)
- Up to 128 General-Purpose I/Os (GPIO)