

IP816A-LPC-v2 Kit License Plate Capture Solution



Dual Lanes · Anti-Glare · 85MPH (140 km/hr) · Scene Overview · Recognition Distance 20M · Remote Back Focus · DIS · CVA Tech

VIVOTEK's IP816A-LPC-v2 Kit represents a total solution for LPC (License Plate Capture) applications by leveraging the top tier image quality and traffic monitoring ability of the IP816A-LPC box camera. The CaMate IR Illuminator utilizing CVA Tech provides adjustable beam angles for different distances. An headlight filter is implemented to reduce instances of glare from direct headlight contact. The IP816A-LPC-v2 Kit delivers clear license plate images for reliable recognition, in both the sunniest days, and in the darkest nights.

Empowered with VIVOTEK Scene Mode, which provides different exposure levels to avoid overexposure in some lighting

conditions, the IP816A-LPC-v2 Kit can capture clear plate images from the vehicles moving at speeds of up to 85MPH (140 μ).

Value-added features such as DIS (Digital Image Stabilization) and VIVOTEK Snapshot Focus ensure that the IP816A-LPC-v2 Kit can be easily installed and adjusted to provide the perfect LPR solution. Further, with the high-resolution images supporting a wide range of up to two lanes, the IP816A-LPC-v2 Kit is also the most economic solution in LPR applications.

Key Features

- \cdot One Camera Covers Both Scene Overview & LPC View
- \cdot Supreme Anti-Glare Capability
- \cdot One Camera Covers Dual Lanes
- · Easy Installation and Low Maintenance
- · VIVTOTEK Snapshot Focus, RBF, and DIS to Support Traffic Monitoring Applications
- · CaMate IR Illuminator with CVA Tech (Continuous Variable Angle Technology)
- · Vandal-Proof IK10-rated and Weather-Proof IP68-rated Housing

Functions

One Camera Covers Both Scene Overview & LPC View

VIVOTEK's 2 Mega-pixel resolution kit provides not only sufficient PPF for license plate capture, but also for a clear overview of moving vehicles, including car color, brand and type for general traffic surveillance purposes. Therefore, with only one VIVOTEK IP816A-LPC-v2 Kit, users can yield more information from one single location.





Scene Overview

License Plate Recognition View

Supreme Anti-Glare Capability

Capturing images at night is a challenging issue for any surveillance application, but for License Plate Capture applications the challenge is even greater due to noise and glare caused by the headlights of cars. The IP816A-LPC-v2 Kit is equipped with external 48W/80W IR Illuminators and a delicate headlight filter, which help to filter out reflected light and only capture detailed information from the plates. Moreover, the IR threshold is also programmed to deploy the IR Illuminator automatically to ensure 24/7 & Day/Night performance.





Clear Image Captured with IR Illuminators and Headlight Filter

One Camera Covers Dual Lanes

The high image quality of the IP816A-LPC-v2 Kit ensures wide coverage of two lanes with one Camera, whether used for Highway monitoring or for Street monitoring. With a single IP816A-LPC-v2 Kit covering dual lanes, the total cost of traffic monitoring will be reduced.

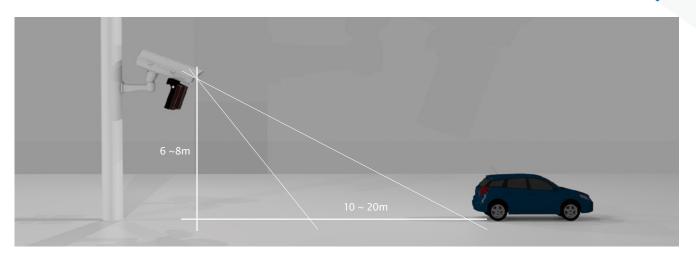




Day Time

Night Time

Suggested Installation



Ordering Information



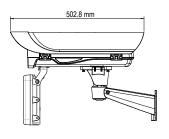
Kit	IP816A-LPC-v2 Kit (Highway)	IP816A-LPC-v2 Kit (Street)	
P/N.	199002900G	199002800G	
Category	Model/Description		
IP Camera	IP816A-LPC (Highway) 2MP, 60fps, WDR Pro, Remote Back Focus, 3DNR, EIS, Snapshot Focus	IP816A-LPC (Street) 2MP, 60fps, WDR Pro, Remote Back Focus, 3DNR, EIS, Snapshot Focus	
IR Illuminator	CM80I8-2040 80W IR Illuminator, 850nm, 20° ~ 40° adjustable beam angle with CVA Tech	CM48I8-2040 48W IR Illuminator, 850nm, 20° ~ 40° adjustable beam angle with CVA Tech	
Enclosure	AE-23L Outdoor Enclosure with Anti-Icing Heated Glass, Fan, 24V AC in, IP68, IK10, Sun shield, 80W surge protect		
Bracket	AM-21E Cable Management, Wall Mount Bracket		

Technical Specifications

Model	IP816A-LPC-v2 Kit (Highway) IP816A-LPC-v2 Kit (Street)
Max. Speed	Highway: 85MPH (140 km/hr) Street: 60MPH (90 km/hr)
IR Threshold	IR on: 300 Lux IR off: 600 Lux RS485 configurable
Shutter Time	Highway: 1/1,600 to 1/10,000 sec. Street: 1/800 to 1/10,000 sec.
Max. Shutter Time	1/5 to 1/10,000 sec.
IR Illuminators	Highway: 80W, $20^{\circ} \sim 40^{\circ}$ adjustable x 1 Street: 48W, $20^{\circ} \sim 40^{\circ}$ adjustable x 1
Capture Range	Up to 20 meters
Captured Lanes	Dual Lanes
Power Input	AC 24V
Power Consumption	Highway: Max. 110W (AC 24V), Suggested Power: AC 24V / 7A Street: Max. 78W (AC 24V), Suggested Power: AC 24V / 5A
Weight	6,482 g
Housing	Weather-proof IP68-rated housing Vandal-proof IK10-rated housing
Operating Temperature	Starting Temperature: $0^{\circ}\text{C} \sim 60^{\circ}\text{C} \ (32^{\circ}\text{F} \sim 140^{\circ}\text{F})$ Working Temperature: $-20^{\circ}\text{C} \sim 60^{\circ}\text{C} \ (-4^{\circ}\text{F} \sim 140^{\circ}\text{F})$ with optional cold start
Humidity	90%
Video	
Compression	H.264 & MJPEG
Maximum Streams	2 simultaneous streams
Image Settings	Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks, scheduled profile settings; 3D noise reduction, DIS, video rotation, snapshot focus, scene mode
Network	
Users	Live viewing for up to 10 clients
Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP,

Interface	10Base-T/100BaseTX Ethernet (RJ-45) *It is highly recommended to use standard Cat. 5e & Cat. 6 cables which are compliant with the 3P/ETL standard.
ONVIF	Supported, specification available at www. onvif.org
Intelligent Video	
Video Motion Detection	Triple-window video motion detection
Alarm and Event	
Alarm Triggers	Motion Detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection, IR Status
Alarm Events	Event notification using digital output, HTTP, SMTP, FTP, NAS server and SD Card File upload via HTTP, SMTP, FTP, NAS server and SD card
General	
Smart Focus System	RBF (Remote Back Focus)
IP Camemra Connectors	RJ-45 for Network/PoE connection AC 24V power input Digital input*3 Digital output*1
Safety Certifications	IP Camera: CE, LVD, FCC Class B, VCCI, C-Tick, UL
Warranty	36 months
System Requirements	
Operating System	Microsoft Windows 8/7/Vista/XP/2000
Web Browser	Mozilla Firefox 7~43 (streaming only) Internet Explorer 7/8/9/10/11
Other Players	VLC: 1.1.11 or above QuickTime: 7 or above
Dimensions	





Technical Specifications

Network Camera				
Model	IP816A-LPC (Highway) IP816A-LPC (Street)			
CPU	Multimedia SoC (System-on-Chip)			
Flash	256 MB			
RAM	384 MB			
Camera Features				
Image Sensor	1/1.9" Progressive CMOS			
Maximum Resolution	1920x1080 (2MP)			
Lens Type	Vari-focal			
Focal Length	f = 12 ~ 40 mm			
Aperture	F2.36 ~ F2.44			
Auto-iris	P-iris (DC-iris reserved)			
Field of View	10.2° ~ 30° (Horizontal) 8° ~ 22° (Vertical) 12° ~ 38° (Diagonal)			
WDR Technology	WDR Pro (Default: Off)			
Day/Night	Removable IR-cut filter for day & night function			
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built in)			
On-board Storage	Slot type: SD/SDHC/SDXC card slot			
Video				
Maximum Frame Rate	30 fps @ 1920x1080 60 fps @ 1920x1080 (In one-stream mode only) (In both compression mode)			
S/N Ratio	50.8 dB			
Dynamic Range	100 dB			
Audio				
Audio Capability	Two-way audio (full duplex)			
Compression	AAC, G.711, G.726			
Interface	External microphone input			

IR Illuminator	
Model	CM8018-2040: Highway, 80W, 20° ~ 40° adjustable CM4818-2040: Street, 48W, 20° ~ 40° adjustable
Max. Distance	CM80I8-2040: 170 ~ 280 meters CM48I8-2040: 120 ~ 200 meters
Beam Angle	20° ~ 40° adjustable
Input Power	CM80I8-2040: 24VDC ±10%, 24VAC(50/60Hz) ±10% CM48I8-2040: 12~24VDC ±10%, 24VAC(50/60Hz) ±10%
Power Consumption	CM8018-2040: 80W CM4818-2040: 48W
Weight	2,100 g
Housing	Weather-proof IP68-rated housing Vandal-proof IK10-rated housing
Operating Temperature	-50°C ~ 60°C (-58°F ~ 140°F)
Color	Black
Wavelength	850nm
Dimensions	220 x 160 x 73 mm (8.6 × 6.3 × 2.9 inch)
Included Accessories	U-Type Bracket (134 \times 34 \times 81.5 mm)
Certifications	CE, FCC, IEC
Integrated Control	Built-in photocell for automatic IR on/off

