



# **IP816A-LPC-v2 Kit** License Plate Capture Solution

Dual Lanes  $\cdot$  Anti-Glare  $\cdot$  85MPH (140 km/hr)  $\cdot$  Scene Overview  $\cdot$  Recognition Distance 20M  $\cdot$  Remote Back Focus  $\cdot$  DIS  $\cdot$  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 km/hr).

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
- · Supreme Anti-Glare Capability
- 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

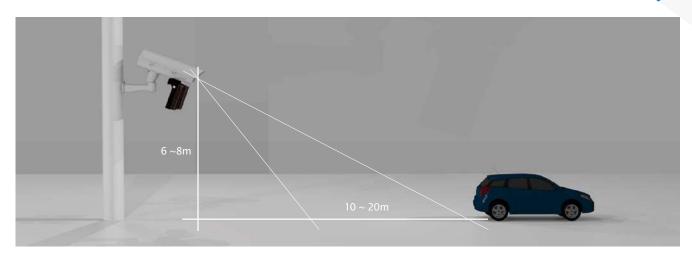
The high image quality of the IP816A-LPC-v2 Kit ensures wide coverage of two lanes with one Camera, whether used for Highway monitoring or for Street monitoring. With a single IP816A-LPC-v2 Kit covering dual lanes, the total cost of traffic monitoring will be reduced.



Day Time

Night Time

# Suggested Installation



## **Ordering Information**



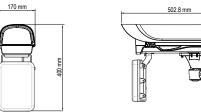
Kit	IP816A-LPC-v2 Kit (Highway)	IP816A-LPC-v2 Kit (Street)			
KIL	irotoA-LrC-vz Kit (ingliway)	IFOTOA-LFC-V2 Kit (Street)			
P/N.	199002900G	199002800G			
Category	Model/Description				
IP Camera	<b>IP816A-LPC (Highway)</b> 2MP, 60fps, WDR Pro, Remote Back Focus, 3DNR, EIS, Snapshot Focus	IP816A-LPC (Street) 2MP, 60fps, WDR Pro, Remote Back Focus, 3DNR, EIS, Snapshot Focus			
IR Illuminator	<b>CM8018-2040</b> 80W IR Illuminator, 850nm, 20° ~ 40° adjustable beam angle with CVA Tech	<b>CM4818-2040</b> 48W IR Illuminator, 850nm, 20° ~ 40° adjustable beam angle with CVA Tech			
Enclosure	<b>AE-23L</b> Outdoor Enclosure with Anti-Icing Heated Glass, Fan, AC24V or DC24V in, IP68, IK10, Sun shield, 80W surge protect				
Bracket	AM-21E Cable Management, Wall Mount Bracket				

### **Technical Specifications**

IP816A-LPC-v2 Kit		
Model	IP816A-LPC-v2 Kit (Highway) IP816A-LPC-v2 Kit (Street)	Protocols
Max. Speed	Highway: 85MPH (140 km/hr) Street: 60MPH (90 km/hr)	Interface
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.	ONVIF
Max. Shutter Time	1/5 to 1/10,000 sec.	Video Motion
IR Illuminators	Highway: 80W, 20° ~ 40° adjustable x 1 Street: 48W, 20° ~ 40° adjustable x 1	Alarm and E
Capture Range	Up to 20 meters	Alarm Triggers
Captured Lanes	Dual Lanes	
Power Input	AC24V or DC24V	
Power Consumption	Highway: Max. 110W (AC24V/DC24V), Suggested Power: AC24V or DC24V/5A	Alarm Events
	Street: Max. 78W (AC24V/DC24V), Suggested Power: AC24V or DC24V/3.5A	General
Weight	6,482 g	Smart Focus S
Housing	Weather-proof IP68-rated housing Vandal-proof IK10-rated housing	IP Camemra C
Operating Temperature	Starting Temperature: 0°C ~ 60°C (32°F ~ 140°F) Working Temperature: -20°C ~ 60°C (-4°F ~ 140°F) -40°C ~ 60°C (-40°F ~ 140°F), with optional cold start heater	Safety Certific Warranty System Regi
Humidity	90%	Operating Sys
Video		operating bys
Compression	H.264 & MJPEG	Web Browser
Maximum Streams	2 simultaneous streams	Other Players
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	Dimensions
Network		
Users	Live viewing for up to 10 clients	ų

Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS			
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 AC24V or DC12V 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			

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## **Technical Specifications**

Network Camera		IR Illuminator		
Model	IP816A-LPC (Highway) IP816A-LPC (Street)	Model	CM8018-2040: Highway, 80W, 20° ~ 40° adjustable CM4818-2040:	
CPU	Multimedia SoC (System-on-Chip)		Street, 48W, 20° ~ 40° adjustable	
Flash	256 MB	Max. Distance	CM80I8-2040: 170 ~ 280 meters CM48I8-2040: 120 ~ 200 meters	
RAM	384 MB	Beam Angle	20° ~ 40° adjustable	
Camera Features			CM8018-2040: 24VDC ±10%,	
Image Sensor	1/1.9" Progressive CMOS	Input Power	24VAC(50/60Hz) ±10%	
Maximum Resolution	1920x1080 (2MP)		CM48I8-2040: 12~24VDC ±10%, 24VAC(50/60Hz) ±10%	
Lens Type	Vari-focal	Power Consumption	CM8018-2040: 80W CM4818-2040: 48W	
Focal Length	f = 12 ~ 40 mm	Weight	2,100 g	
Aperture	F2.36 ~ F2.44		Weather-proof IP68-rated housing	
Auto-iris	P-iris (DC-iris reserved)	Housing	Vandal-proof IK10-rated housing	
Field of View	10.2° ~ 30° (Horizontal) 8° ~ 22° (Vertical) 12° ~ 38° (Diagonal)	Operating Temperature	-50°C ~ 60°C (-58°F ~ 140°F)	
		Color	Black	
WDR Technology	WDR Pro (Default: Off)	Wavelength	850nm	
Day/Night	Removable IR-cut filter for day & night function	Dimensions	220 x 160 x 73 mm (8.6 × 6.3 × 2.9 inch)	
	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built in)	Included Accessories	U-Type Bracket (134 × 34 × 81.5 mm)	
Pan/Tilt/Zoom Functionalities		Certifications	CE, FCC, IEC	
On-board Storage	Slot type: SD/SDHC/SDXC card slot	Integrated Control	Built-in photocell for automatic IR on/off	
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 Audio output			

### **Compatible Accessories**



AL-239 8 ~ 80 mm, F1.6, DCiris

AL-24B 3.6 ~ 17 mm, F1.5, P-iris



12 ~ 40 mm, F1.8, P-iris (Standard Package)

#### th

Lens

Others					
Brackets		Power Supply	Power Box		
AM-314 Pole mount bracket	AM-315 Pole mount bracket	HLG-120H-24 120W Single Output Switching Power Supply, DC24V	AA-351 Outdoor power box, IP67, IK10	AA-352 Outdoor power box, IP67, IK10	



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