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 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.
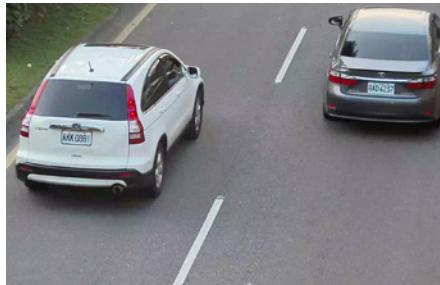
Key Features

· One Camera Covers Both Scene Overview & LPC View

· Supreme Anti-Glare Capability

· One Camera Covers Dual Lanes

· Easy Installation and Low Maintenance

· VIVOTEK Snapshot Focus, RBF, and DIS to Support Traffic Monitoring Applications

· CaMate IR Illuminator with CVA Tech (Continuous Variable Angle Technology)

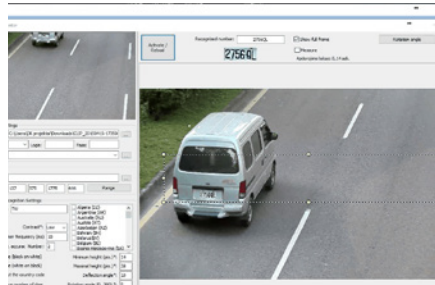· Vandal-Proof IK10-rated and Weather-Proof IP68-rated Housing

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.
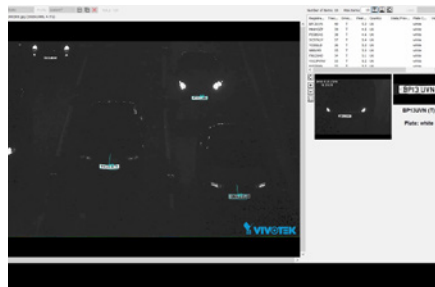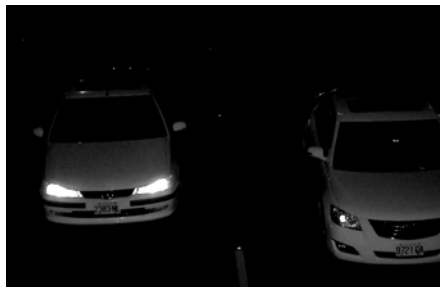

Scene Overview   License Plate Recognition View
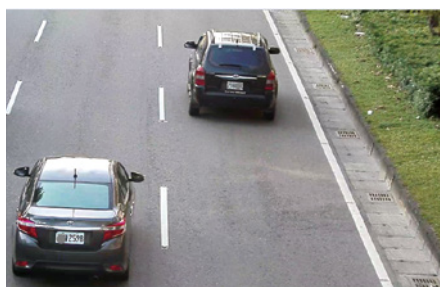
Supreme Anti-Glare Capability

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.

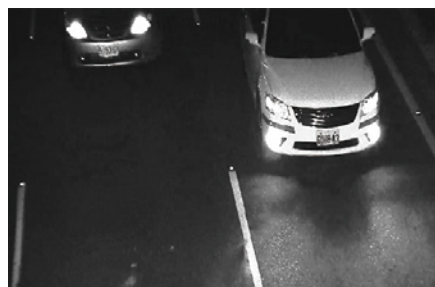Clear Image Captured with IR Illuminators and Headlight Filter

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.
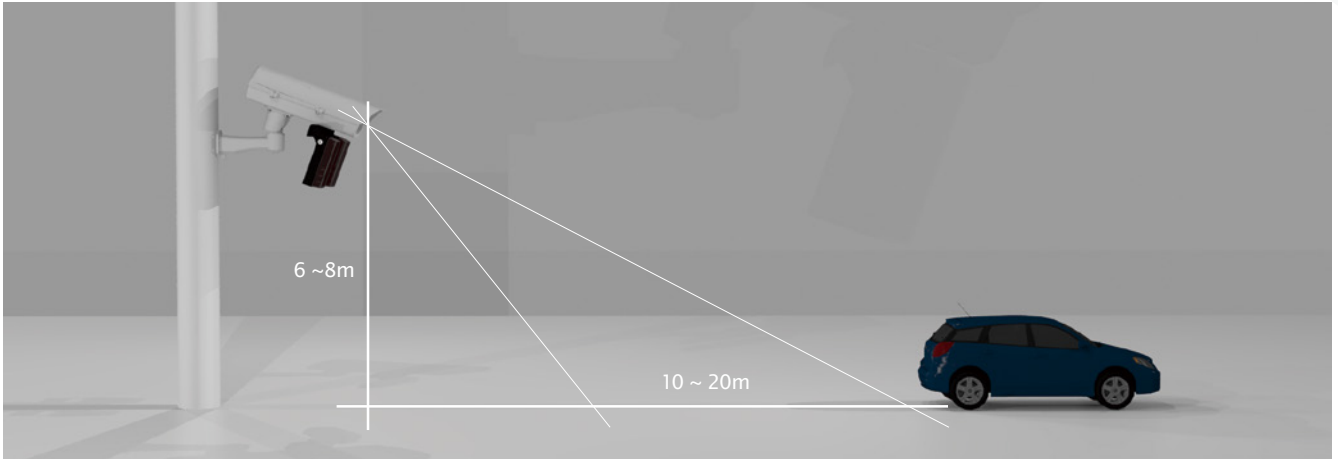

Day Time   Night Time

Suggested Installation

6 ~8m

10 ~ 20m

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, DIS, Snapshot Focus	**IP816A-LPC (Street)** 2MP, 60fps, WDR Pro, Remote Back Focus, 3DNR, DIS, 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, 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)
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˚ ~ 40˚ adjustable x 1 Street: 48W, 20˚ ~ 40˚ adjustable x 1
Capture Range	Up to 20 meters
Captured Lanes	Dual Lanes
Power Input	AC24V or DC24V
Power Consumption	Highway: Max. 110W (AC24V/DC24V), Suggested Power: AC24V or DC24V/5A Street: Max. 78W (AC24V/DC24V), Suggested Power: AC24V or DC24V/3.5A
Weight	6,482 g
Housing	Weather-proof IP68-rated housing Vandal-proof IK10-rated housing
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
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, 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

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 Audio output

IR Illuminator

Model	CM80I8-2040: Highway, 80W, 20˚ ~ 40˚ adjustable CM48I8-2040: 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	CM80I8-2040: 80W CM48I8-2040: 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 × 34 × 81.5 mm)
Certifications	CE, FCC, IEC
Integrated Control	Built-in photocell for automatic IR on/off

Compatible Accessories

Lens

AL-239 8 ~ 80 mm, F1.6, DC-iris	**AL-24A** 12 ~ 40mm, F1.8, P-iris (Standard Package)	**AL-24B** 3.6 ~ 17 mm, F1.5, P-iris

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