

PIKO / AI IP CAMERA

Piko 5MP License Plate IP Camera

A long-range license plate capture camera with embedded plate analytics, a 6–50mm remote zoom lens and a rugged IP67 housing for entrances, gates and open lots.

5MP AT 30FPS

EMBEDDED LPR ANALYTICS

IP67 / IK10

NDA COMPLIANT



OVERVIEW

The Piko 5MP License Plate IP Camera is built for a single job: reading plates reliably, at distance, in real conditions. License plate analytics run on the camera itself, so plate reads are produced at the edge and passed to the VMS or access platform without a separate recognition server.

A 6–50mm remote zoom and auto-focus lens covers everything from a single gate lane to a plate read across a wide approach, and the lens can be adjusted from the browser after the camera is installed and sealed. Six high-power LEDs provide illumination to 40m, while True WDR, P-Iris and a 1/2.8" SONY STARVIS sensor hold plate legibility against headlights, low sun and mixed lighting.

Deep learning object and people tracking classify what else is in the scene, so plate events can be correlated with vehicle and pedestrian activity. Smart Bitrate Control, Region of Interest and multi-streaming keep bandwidth and storage predictable on sites with many lanes, and ONVIF Profile S/T/M support keeps integration straightforward.

The aluminum die-cast housing carries an IP67 weather rating, IK10 impact resistance and a -40°F to 140°F operating range, making the camera suitable for gated entries, parking structures, weigh points, fuel and cannabis sites, and any perimeter where vehicle identity is part of the record.

CORE FEATURES

PLATE CAPTURE

- Embedded license plate analytics
- 6–50mm remote zoom and auto-focus lens
- 40.8° (wide) to 6.9° (tele) field of view
- 6 × high power IR LEDs to 40m

AI & ANALYTICS

- Deep learning object tracker
- Deep learning people tracker
- Piko AI event triggers with alarm in/out
- Metadata output (JSON/XML)

PERFORMANCE OPTIMIZATION

- Smart Bitrate Control
- Region of Interest (ROI)
- 3D Digital Noise Reduction

TECHNICAL SPECIFICATIONS

IMAGE & CAMERA	
Image Sensor	1/2.8" SONY STARVIS EXMOR 5M CMOS
Effective Pixels	2592 (H) × 1944 (V)
Scanning System	Progressive scanning
Shutter Speed	Auto / Manual: 1/30 ~ 1/32,000 sec, anti-flicker, slow shutter
Day / Night	True Day/Night (removable IR-cut filter)
Minimum Illumination	0.08 Lux (Color) / 0 Lux (IR On)
Wide Dynamic Range	True WDR
S/N Ratio	50 dB
Lens Type	Remote zoom and focus (auto-focus)
Focal Length	6 – 50 mm, F1.6
Field of View	Horizontal: approx. 40.8° (Wide) to 6.9° (Tele)
Iris	P-Iris
AGC Control	Auto
INFRARED (IR)	
IR LEDs	6 × High Power LEDs
IR Distance	Up to 40m

VIDEO	
Compression	H.265, H.264, MJPEG
Profile	H.264: MP / HP · H.265: MP
Max Resolution	2592 × 1944
Frame Rate	Up to 30fps at 5MP
Multiple Profile	2592×1944/30 + 720p/30 (H.264 / H.265) + MJPEG
Bitrate	100 Kbps – 25 Mbps
Bitrate Control	Multi-rate CBR / VBR, controllable frame rate and bandwidth
Streaming	Multi-stream, separate preview and recording rates
Image Enhancements	3D-DNR, ROI, Smart Bitrate Control
Privacy Mask	16 programmable zones
Image Settings	Exposure, White Balance, Sharpness, Flip/Mirror/Corridor
Analogue Output	CVBS 1.0V p-p, 4:3 (installation only)

AUDIO	
Audio Streaming	Two-way
Compression	G.711 u-law 8KHz, AAC-LC 48Kbps at 8KHz
Input	Line in, 3VDC (3mA), 3K Ohm input impedance
Output	Line out, max output level 1Vrms

EVENT	
Event Triggers	Motion alarm, temperature critical, DI, Piko AI
Pre / Post Recording	Pre: 1 – 5 sec · Post: 1 – 240 sec
Event Notification	FTP, e-mail, alarm-out, SD card

NETWORK & INTEGRATION	
Ethernet	10 / 100 Base-T
IP	IPv4
Protocols	TCP/IP, UDP, AutoIP, RTP, RTSP, NTP, HTTP, HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP, SNMP v1/v2/v3, UPnP, RTCP, SSH, ONVIF
Security	HTTPS (SSL), IP filtering, 802.1x, Digest Authentication
Integration	ONVIF Profile S/T/M, CGI API
Edge Storage	1 × microSD / microSDHC / microSDXC

POWER & CONNECTIVITY

Power Input	PoE+ (IEEE 802.3at Class 4) / DC12V
Power Consumption	DC12V max 13.2W · PoE max 15.6W
External I/O	1 × Alarm In / 1 × Alarm Out

ENVIRONMENTAL

Operating Temperature	-40°F to 140°F (-40°C to 60°C)
Humidity	10–90% RH (non-condensing)
Weather Rating	IP67
Impact Protection	IK10

GENERAL

Material	Aluminum die-cast, white
Dimensions	309.8 × 96.7 mm
Weight	1.2 kg
Language	English

COMPLIANCE

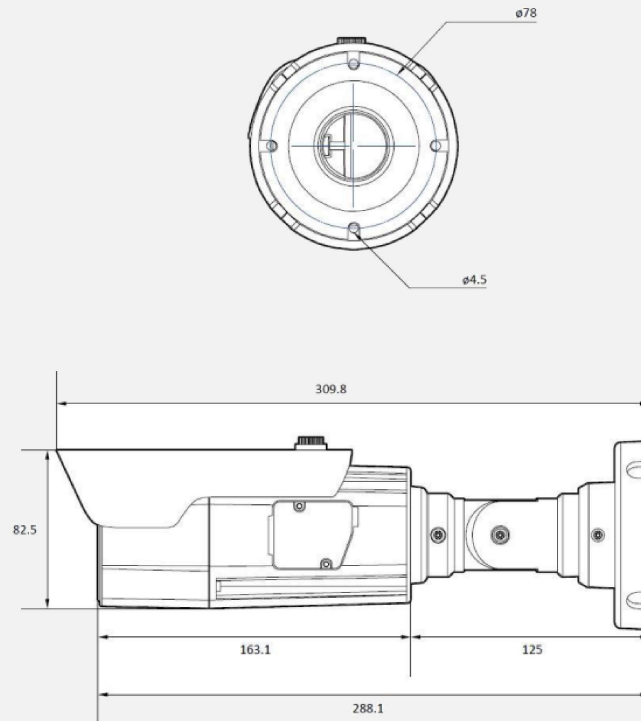
Certifications	CE, FCC, IP67, IK10
Procurement Compliance	NDAA Compliant

OPTIONAL PIKOANALYTICS

License plate analytics are embedded on this camera. PikoANALYTICS is an additional optional package built on an advanced tracking algorithm with a rich library of detection behaviors. Intrusion detection zones and rules, tamper detection and deep-learning object tracking are supported as standard.

CAPABILITY	WHAT IT DOES
Analytics Engine	PikoANALYTICS advanced tracking algorithm with rich library of detection behaviors.
Detection Zones & Rules	40 rules and zones (multi-segment polygons and lines) as standard.
Intrusion Detection	Detection of the presence of an object.
Detection Behaviors	Enter, Exit, Appear, Disappear, Stop, Direction, Dwell filter, Tailgating.
Object Tracking	Deep learning based object identification (Person, Cyclist, Car, Van, Truck, Motorcycle, Bicycle, Bag) removes false object detection.
People Tracking	Deep learning based people identification and tracking.
Logical Rules	Extends standard rules to allow various combinations of the inputs.
Counting & Lines	High accuracy people and vehicle counting, 20 counters in total.
Tamper Detection	Supported as standard. Detects coverage of the camera's view.
Metadata	JSON and plain XML containing event information and tracked-object information — bounding box, tail history, and object attributes (type and color).

DIMENSIONS



UNIT: MM

Overall Length (with arm)	309.8 mm
Camera Body Length	163.1 mm
Body Diameter	$\varnothing 78$ mm
Height (with sunshield)	82.5 mm
Weight	1.2 kg
Housing Material	Aluminum die-cast

MOUNTING & COMPATIBLE PARTS

The camera ships with an integrated wall arm, so no separate wall bracket is required. Corner and pole installations add an adapter plate behind that arm; a junction box mounts the camera to a surface and houses the cable termination.

MOUNTING TYPE	WHAT PARTS TO ORDER
Wall	No accessory required — integrated wall arm
Corner	PC001 (Corner Mount Adapter Plate)
Pole	PP001 (Pole Mount Adapter Plate)
Surface	PJC11 (Junction Box)

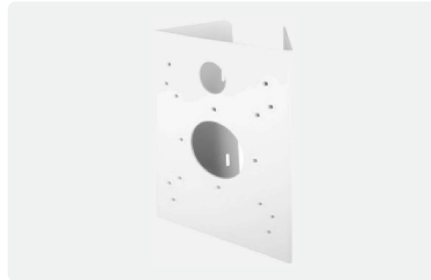
COMPATIBLE MOUNTS



PC001

145 × 200 mm (5.7 × 7.9 in) · 1.3 kg

Corner mount adapter plate, lets the camera arm attach to a building corner.



PP001

139.5 × 200 mm (5.5 × 7.9 in) · 700 g

Pole mount adapter plate, straps or bolts the camera arm to a round pole.



PJC11

135.8 × 60 mm (5.3 × 2.4 in) · 780 g

Junction box. Connects directly to the camera to mount to the wall or ceiling and houses cable connections.

Weatherproof once fully assembled with the camera and wall- or ceiling-mounted; seal uneven or rough surfaces during install.

ORDERING INFORMATION

PART NUMBER	DESCRIPTION	ONBOARD STORAGE
P-5MP-LPR-V1	Piko 5MP License Plate IP Camera, remote zoom and focus 6–50mm	microSD / microSDHC / microSDXC
PE-5MP-LPR-1TB-V1	Piko 5MP License Plate IP Camera, PikoEDGE model — runs the Piko VMS onboard the chipset	1 TB microSD included

PE = PIKOEDGE A PE part number is the PikoEDGE version of the camera: it runs the Piko VMS onboard the chipset and ships with a 1TB SD card included. A P part number is the standard camera, with microSD storage supported but not supplied.

COMPLIANCE

- CE
- FCC
- IP67
- IK10
- NDAA Compliant
- ONVIF Profile S/T/M, CGI API

Contact your CSG account manager for pricing, availability and design support.

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