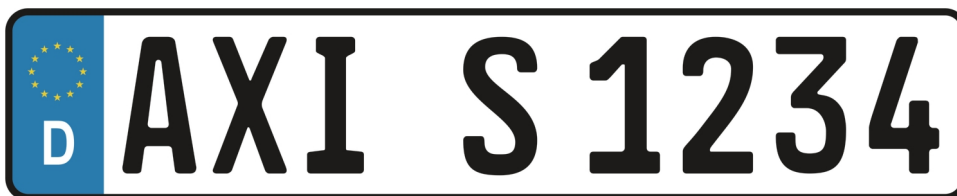# AXIS P1455-LE-3 License Plate Verifier Kit
Cost-effective kit for free-flow traffic

AXIS P1455-LE-3 includes an HDTV 1080p fixed bullet camera with AXIS License Plate Verifier preinstalled. Featuring free-flow mode, it's ideal for use in traffic at up to 105 km/h (65 mph), on access roads, in city centers, gated communities, and campuses. The compact and robust IK10-rated camera includes shock detection for installation in all environments. Featuring a 29 mm telephoto lens, this cost-effective solution can read license plates from 7 to 20 meters (20-65 feet). It includes Axis image enhancement technologies as well as Optimized IR – to ensure sharp images for license plate reading 24/7. Furthermore, it offers tight integration with AXIS Camera Station.

> **For use at up to 105 km/h (65 mph)**
> **Read license plates from 7-20 m (20-65 ft)**
> **Proven for tough weather conditions**
> **OptimizedIR for recognition in darkness**
> **Integration with AXIS Camera Station**

AXIS License Plate Verifier

Application

Compute platform	Edge
Licenses	AXIS License Plate Verifier license included.
Configuration	Web configuration included
Settings	Define area of interest in scene. Allow- and blocklist logic. Barrier mode: Open to all, open to allowlisted, open to all but blocklisted. Minimum width: 130 pixels for one-row license plates; 70 pixels for two-row license plates. FIFO event log entries including thumbnail image of license plate. Up to 1000 entries on camera storage. Up to 100 000 entries on AXIS Surveillance Cards. Configurable retention time of stored events
Detection range	7.0 to 20 m (20 to 65 ft)
Vehicle speed	Up to 105 km/h (65 mph)
Detection time	Less than 1 second.

Scenarios

Typical applications	**Free-flow traffic monitoring** Reads license plates at speeds up to 105 km/h (65 mph). Ideal for city centers, larger access roads, toll plazas, and areas like campuses, harbors or airports. Enables event triggers in a VMS, such as AXIS Camera Station to facilitate LPR-based search. **Efficient vehicle access control** Efficiently automates the entry and exit procedures for authorized vehicles at depots, service centers, lots, priority lanes, parking facilities, and various other locations. Validates license plates against allowlists or blocklists for efficient, seamless access control. Supports up to 10,000 license plates in each list. **Adding more functionality** Integrate with Axis network door controllers for increased options and functionality. Axis network door controllers, in conjunction with AXIS Camera Station Secure Entry, support more advanced access rules, schedules, and detailed event logs. Compatible with various partner software, offering diverse credential options and tailored features to meet specific needs.

System integration

Application Programming Interface	Open API for software integration.
Event streaming	Integrates with camera event management system to enable event streaming to management software and camera actions such as I/O control, notification, and edge storage.
Supported devices	Direct integration with Axis network door controllers and Axis A91 Network I/O Relay Modules.

General

Supported countries	For a complete list of supported countries, go to the product page at *axis.com*
Languages	English

AXIS P1455-LE-3 License Plate Verifier Kit

Camera

Image sensor	1/2.8" progressive scan RGB CMOS
Lens	Varifocal, 10.9-29 mm, F1.7-1.7 Horizontal field of view 29˚-11˚ Vertical field of view 17˚-6.5˚ Varifocal, Remote focus and zoom, P-Iris control, IR corrected
Day and night	Automatically removable infrared-cut filter
Minimum illumination	**Color:** 0.07 lux, at 50 IRE F1.7 **B/W:** 0.01 lux, at 50 IRE F1.7 0 lux with IR illumination on
Shutter speed	1/66500 s to 2 s

System on chip (SoC)

Model	ARTPEC-7
Memory	1024 MB RAM, 512 MB Flash

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG
Resolution	1920x1080 to 160x90
Frame rate	**With Forensic WDR:** Up to 25/30 fps (50/60 Hz) in all resolutions **No WDR:** Up to 50/60 fps (50/60 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264, H.265 and Motion JPEG Axis Zipstream technology in H.264 and H.265 Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265 Low latency mode Video streaming indicator
Multi-view streaming	Up to 8 individually cropped out view areas
Image settings	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, white balance, day/night threshold, exposure mode, exposure zones, defogging, compression, orientation: auto, 0°, 90°, 180°, 270° including Corridor Format, mirroring of images, dynamic text and image overlay, privacy masks, motion-adaptive exposure, electronic image stabilization
Pan/Tilt/Zoom	Digital PTZ, digital zoom

Audio

Audio streaming	Audio in, simplex, two-way audio via edge-to-edge technology
Audio encoding	24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate
Audio input/output	External microphone input or line input, digital audio input, network speaker pairing

Network

Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS, HTTP/2, TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

System integration

Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* One-Click Cloud Connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at *onvif.org*
Onscreen controls	Day/night shift Defogging Wide dynamic range IR illumination Electronic image stabilization Video streaming indicator
Event conditions	Analytics Detectors: live stream accessed, video motion detection, audio detection, day/night mode, shock detection, tampering Hardware: network, temperature

Input Signal: digital input port, manual trigger, virtual inputs
Storage: disruption, recording
System: system ready
Time: recurrence, use schedule
Supervised input changed state
MQTT subscribe

Event actions	Record video: SD card and network share Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS, TCP and SNMP trap PTZ: PTZ preset, start/stop guard tour Overlay text, external output activation, day/night mode MQTT publish
Built-in installation aids	Pixel counter, remote zoom (3x optical), remote focus, auto rotation

Analytics

Compute capabilities	Machine learning processing unit (MLPU)
Applications	**Included** AXIS License Plate Verifier, Scene metadata AXIS Video Motion Detection, active tampering, shock detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*
AXIS Scene Metadata	**Object classes:** humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates **Object attributes:** confidence, position

Approvals

EMC	EN 55032 Class A, EN 50121-4, EN 55035, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2 **USA:** FCC Part 15 Subpart B Class A **Canada:** ICES-3(A)/NMB-3(A) **Japan:** VCCI Class A **Australia/New Zealand:** RCM AS/NZS CISPR 32 Class A **Railway:** IEC 62236-4
Safety	IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, IS 13252, IEC 62471
Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9)
Network	NIST SP500-267
Cybersecurity	ETSI EN 303 645

Cybersecurity

Edge security	**Software:** Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2), IEEE 802.1AE (MACsec PSK/EAP-TLS), HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	*AXIS OS Hardening Guide* *Axis Vulnerability Management Policy* *Axis Security Development Model* AXIS OS Software Bill of Material (SBOM) To download documents, go to *axis.com/support/cybersecurity/resources* To read more about Axis cybersecurity support, go to *axis.com/cybersecurity*

General

Casing	IP66/IP67-, NEMA 4X-, and IK10-rated casing Polycarbonate blend and aluminium Color: white NCS S 1002-B
Sustainability	PVC free, BFR/CFR free
Power	Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3 Typical: 8.5 W, max 12.95 W 12–28 V DC, typical 7.8 W, max 12.95 W
Connectors	Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T 3.5 mm mic/line in

	Terminal block for 1 supervised alarm input and 1 output (12 V DC output, max. load 25 mA) DC input	**Dimensions**	Ø132 x 264 mm (Ø5.2 x 10.4 in)
IR illumination	OptimizedIR with power-efficient, long-life 850 nm IR LEDs Range of reach 45 m (150 ft) or more depending on the scene	**Included accessories**	Installation guide, Windows® decoder 1-user license, drill hole template, connector kit, mounting bracket, Torx® L-keys AXIS Weather Shield L
Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption (AES-XTS-Plain64 256bit) Recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*	**Optional accessories**	AXIS T94F01M J-Box/Gang Box Plate, AXIS T91A47 Pole Mount, AXIS T94P01B Corner Bracket, AXIS T94F01P Conduit Back Box, AXIS Weather Shield K, Axis PoE Midspans For more accessories, see *axis.com*
Operating conditions	-40 °C to 60 °C (-40 °F to 140 °F) Maximum temperature according to NEMA TS2 (2.2.7): 74 °C (165 °F) Humidity 10–100% RH (condensing)	**Video management software**	AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available at *axis.com/vms*
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)	**Languages**	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Weight	With weather shield: 1.2 kg (2.65 lb)	**Warranty**	5-year warranty, see *axis.com/warranty*

AXIS
COMMUNICATIONS