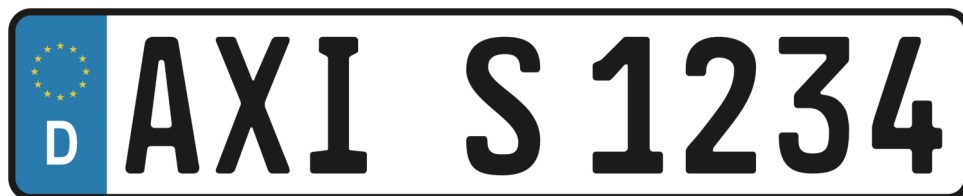# AXIS P1455-LE-3 License Plate Verifier Kit
Easy, cost-effective kit for slow traffic

AXIS P1455-LE-3 includes an HDTV 1080p fixed bullet camera and comes with AXIS License Plate Verifier preinstalled. Featuring freeflow mode, it's ideal for use in slow-speed traffic, such as 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.

> **Ideal for slow-speed traffic**
> **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 onAXIS Surveillance Cards. Configurable retention time of stored events
Detection range	7.0 to 20 m (20 to 65 ft)
Vehicle speed	Up to 70 km/h (45 mph)
Detection time	Less than 1 second.

Scenarios

Typical applications	**License plate recognition in slow speed traffic** In Freeflow, the application can detect and read license plates in slow speed traffic on larger access roads, city centers and enclosed areas like campuses, ports or airports. This allows for LPR-forensic search and LPR triggered events in a VMS such as ACS. **Vehicle access control** In Access control, the application monitors entrances and exits of gated areas such as parking areas. The application verifies detected license plates against an allowlist or a blocklist for granting or denying access to an area. Maximum 10,000 license plates in each list. For a scenario where greater functionality and flexibility are required, use AXIS A1001 Network Door Controller. AXIS A1001 with AXIS Entry Manager software supports access rules including schedules and a more detailed event log. Multiple partner software that support a great number of credentials and features are available.

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 A1001 Network Door Controller 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 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

Security	Password protection, IP address filtering, HTTPS[a] encryption, IEEE 802.1X (EAP-TLS)[a] network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot, Axis Edge Vault with Axis device ID
Supported protocols	IPv4, IPv6 USGv6, HTTP, HTTPS[a], HTTP/2, SSL/TLS[a], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SRTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, LLDP, MQTT v3.1.1, Syslog

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 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

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
Data streaming	Event data
Built-in installation aids	Pixel counter, remote zoom (3x optical), remote focus, auto rotation

Analytics

Compute capabilities	Machine learning processing unit (MLPU)
AXIS Object Analytics	**Object classes:** humans, vehicles **Trigger conditions:** line crossing, object in area Up to 10 scenarios Metadata visualized with color-coded bounding boxes Polygon include/exclude areas Perspective configuration ONVIF Motion Alarm event
Applications	**Included** AXIS License Plate Verifier AXIS Object Analytics AXIS Video Motion Detection, active tampering, shock detection **Supported** AXIS Perimeter Defender Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

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
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
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*
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)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)
Approvals	**EMC** EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 55035, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), VCCI Class A, RCM AS/NZS CISPR 32 Class A **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
Weight	With weather shield: 1.2 kg (2.65 lb)
Dimensions	Ø132 x 264 mm (Ø5.2 x 10.4 in)
Included accessories	Installation guide, Windows® decoder 1-user license, drill hole template, connector kit, mounting bracket, Torx® L-keys AXIS Weather Shield L
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*
Video management software	AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available at *axis.com/vms*
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
Warranty	5-year warranty, see *axis.com/warranty*

a. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

Environmental responsibility:

axis.com/environmental-responsibility

AXIS
COMMUNICATIONS