

# AXIS P1445-LE-3 License Plate Verifier Kit

Easy, cost-effective kit for vehicle access

AXIS P1445-LE-3 License Plate Verifier Kit consists of AXIS P1445-LE Network Camera and pre-installed AXIS License Plate Verifier analytics, making it an easy, cost-effective kit for automated vehicle entry and exit management. With edge storage and I/O ports, AXIS P1445-LE-3 uses allow and block lists to accurately verify access to controlled areas such as parking lots. Furthermore, built-in support for AXIS A1001 Network Door Controller makes it possible to expand the system and an open API allows for integration with third-party software. AXIS P1445-LE-3 features OptimizedIR, impact resistance and a wide temperature range for installation in any environment.

- > **Cost-effective standalone system**
- > **Single lane detection up to 30 km/h (19 mph)**
- > **Allow and block lists for license plate verification**
- > **Day and night with OptimizedIR**
- > **Built-in support for Axis door controller and Axis I/O relay modules**



# 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	2.0 to 7.0 m (6.6 to 23 ft)
Vehicle speed	Up to 30 km/h (19 mph)
Detection time	Less than 1 second.
Scenarios	
Typical applications	<b>Vehicle access control</b> 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. <b>License plate recognition in slow speed traffic</b> 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 AXIS Camera Station.
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 <a href="http://axis.com">axis.com</a>
Languages	English

## AXIS P1445-LE

Camera	
Image sensor	1/2.8" progressive scan RGB CMOS
Lens	2.8-8.5 mm, F1.2 Horizontal field of view: 110°-38° Vertical field of view: 62°-21° Varifocal, Remote focus and zoom, P-Iris control, IR corrected
Day and night	Automatically removable infrared-cut filter
Minimum illumination	HDTV 1080p 25/30 fps with Forensic WDR and Lightfinder: Color: 0.07 lux, at 50 IRE F1.2; B/W: 0.01 lux, at 50 IRE F1.2 HDTV 1080p 50/60 fps with Lightfinder: Color: 0.14 lux, at 50 IRE F1.2; B/W: 0.03 lux, at 50 IRE F1.2 0 lux with IR illumination on
System on chip (SoC)	
Model	ARTPEC-6

Memory	1024 MB RAM, 512 MB Flash
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 to 160x90
Frame rate	HDTV 1080p (1920x1080) with WDR: Up to 25/30 FPS (50/60 HZ) in all resolutions HDTV 1080p (1920x1080) without WDR: Up to 50/60 FPS (50/60 HZ) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/ABR/MBR H.264

<b>Image settings</b>	Saturation, contrast, brightness, sharpness, Forensic WDR: Up to 120 dB depending on scene, white balance, day/night threshold, exposure mode, exposure zones, compression, orientation: auto, 0°, 90°, 180°, 270° including Corridor Format, mirroring of images, dynamic text and image overlay, privacy masks
<b>Pan/Tilt/Zoom</b>	Digital PTZ
<b>Audio</b>	
<b>Audio streaming</b>	Audio in, simplex
<b>Audio encoding</b>	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
<b>Audio input/output</b>	External microphone input or line input Automatic gain control
<b>Network</b>	
<b>Network protocols</b>	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)
<b>System integration</b>	
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at <a href="https://axis.com">axis.com</a> One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at <a href="https://onvif.org">onvif.org</a>
<b>Event conditions</b>	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 MQTT subscribe Storage: disruption, recording System: system ready Time: recurrence, use schedule
<b>Event actions</b>	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
<b>Data streaming</b>	Event data
<b>Built-in installation aids</b>	Pixel counter, remote zoom (3x optical), remote focus, auto rotation
<b>Analytics</b>	
<b>Applications</b>	Included AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard AXIS License Plate Verifier
<b>Cybersecurity</b>	
<b>Edge security</b>	Software: Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Secure boot, Axis Edge Vault with Axis device ID, signed video, secure keystore (CC EAL4+ certified hardware protection of cryptographic operations and keys)
<b>Network security</b>	IEEE 802.1X (EAP-TLS), IEEE 802.1AR, HTTPS/HSTS, TLS v1.2/v1.3, Network Time Security (NTS), X.509 Certificate PKI, IP address filtering

<b>Documentation</b>	<i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> AXIS OS Software Bill of Material (SBOM) To download documents, go to <a href="https://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="https://axis.com/cybersecurity">axis.com/cybersecurity</a>
<b>General</b>	
<b>Casing</b>	IP66/IP67-, NEMA 4X-, and IK10-rated casing Polycarbonate blend and aluminium Color: white NCS S 1002-B
<b>Sustainability</b>	PVC free
<b>Power</b>	Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3 Typical: 5.6 W, max 12.95 W
<b>Connectors</b>	Shielded RJ45 10BASE-T/100BASE-TX PoE 3.5 mm mic/line in I/O: 4-pin terminal block for 1 alarm input and 1 output
<b>IR illumination</b>	OptimizedIR with power-efficient, long-life 850 nm IR LEDs
<b>Storage</b>	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 <a href="https://axis.com">axis.com</a>
<b>Operating conditions</b>	-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)
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
<b>Approvals</b>	EMC EN 55032 Class A, EN 50121-4, IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A, KCC KN32 Class A, KN35 Safety IEC/EN/UL 62368-1, IEC/EN/UL 60950-22, 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
<b>Weight</b>	With weather shield: 1 kg (2.2 lb)
<b>Dimensions</b>	Ø132 x 260 mm (Ø5 3/16 x 10 1/4 in)
<b>Included accessories</b>	Installation guide, Windows® decoder 1-user license, drill hole template, connector kit, mounting bracket AXIS Weather Shield L
<b>Optional accessories</b>	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 <a href="https://axis.com">axis.com</a>
<b>Video management software</b>	AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available at <a href="https://axis.com/vms">axis.com/vms</a>
<b>Languages</b>	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
<b>Warranty</b>	5-year warranty, see <a href="https://axis.com/warranty">axis.com/warranty</a>