

## AXIS P3265-LVE-3 License Plate Verifier Kit

Easy, cost-effective vehicle access control

AXIS P3265-LVE-3 includes a 2 MP dome camera and comes with AXIS License Plate Verifier preinstalled. This easy-to-install kit verifies license plates against a list of authorized or unauthorized number plates stored in the camera. Processing and storage take place in the camera, so there's no need for expensive servers, and bandwidth requirements are reduced. This vandal-resistant camera includes shock detection, so it's safe to use even when installed at lower, more accessible heights. And, Axis OptimizedIR ensures the ideal image settings for license plate reading— 24/7. Furthermore, it offers integration with video management systems (VMS) for complex requirements.

- > [All-in-one vehicle access control](#)
- > [Support for allow and blacklist](#)
- > [Vandal- and weather-resistant](#)
- > [Built-in support for Axis Network Door Controllers](#)
- > [OptimizedIR for recognition in darkness](#)



# AXIS License Plate Verifier

## Application

<b>Compute platform</b>	Edge
<b>Licenses</b>	AXIS License Plate Verifier license included.
<b>Configuration</b>	Web configuration included
<b>Settings</b>	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
<b>Detection range</b>	2.0 to 7.0 m (6.6 to 23 ft)
<b>Vehicle speed</b>	Up to 30 km/h (19 mph)
<b>Detection time</b>	Less than 1 second.

## Scenarios

<b>Typical applications</b>	<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.
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## System integration

<b>Application Programming Interface</b>	Open API for software integration.
<b>Event streaming</b>	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.
<b>Supported devices</b>	Direct integration with AXIS A1001 Network Door Controller, AXIS A91 Network I/O Relay Modules, AXIS A1601 Network Door Controller, and 2N IP Device.

## General

<b>Supported countries</b>	For a complete list of supported countries, go to the product page at <a href="http://axis.com">axis.com</a>
<b>Languages</b>	English

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Camera	
Image sensor	1/2.8" progressive scan RGB CMOS
Lens	Varifocal, 3.4–8.9 mm, F1.8 Horizontal field of view: 100°–36° Vertical field of view: 53°–20° Minimum focus distance: 0.5 m (1.6 ft) IR corrected, remote zoom and focus, P-Iris control
Day and night	Automatic IR-cut filter Hybrid IR filter
Minimum illumination	With Lightfinder 2.0: Color: 0.1 lux at 50 IRE, F1.8/1.6 B/W: 0.02 lux at 50 IRE, F1.8/1.6 0 lux with IR illumination on
Shutter speed	1/66500 s to 2 s
Camera angle adjustment	Pan ±180°, tilt +75°, rotation ±175°
System on chip (SoC)	
Model	ARTPEC-8
Memory	1024 MB RAM, 8192 MB Flash
Compute capabilities	Deep learning processing unit (DLPU)
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	16:9: 1920x1080 to 160x90 16:10: 1440x900 to 160x100 4:3: 1440x1080 to 160x120
Frame rate	With WDR: Up to 25/30 fps (60/50 Hz) in all resolutions Without WDR: Up to 50/60 fps (60/50 Hz) in all resolutions
Video streaming	Up to 20 unique and configurable video streams <sup>a</sup> 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
Signal-to-noise ratio	>55 dB
WDR	Forensic WDR: Up to 120 dB depending on scene WDR – forensic capture
Multi-view streaming	2 individually cropped out view areas
Noise reduction	Spatial filter (2D noise reduction) Temporal filter (3D noise reduction)
Image settings	Saturation, contrast, brightness, sharpness, white balance, day/night threshold, local contrast, tone mapping, exposure mode, exposure zones, defogging, compression, rotation: 0°, 180° including mirroring, text and image overlay, dynamic text and image overlay, privacy masks, polygon privacy mask, target aperture
Image processing	Axis Zipstream, Lightfinder 2.0, OptimizedIR
Pan/Tilt/Zoom	Digital PTZ, preset positions
Audio	
Audio features	AGC automatic gain control Network speaker pairing
Audio streaming	Configurable duplex: Two-way (half duplex, full duplex)
Audio input	10-band graphic equalizer Input for external unbalanced microphone, optional 5 V microphone power Digital input, optional 12 V ring power Unbalanced line input
Audio output	Output via network speaker pairing Line output
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

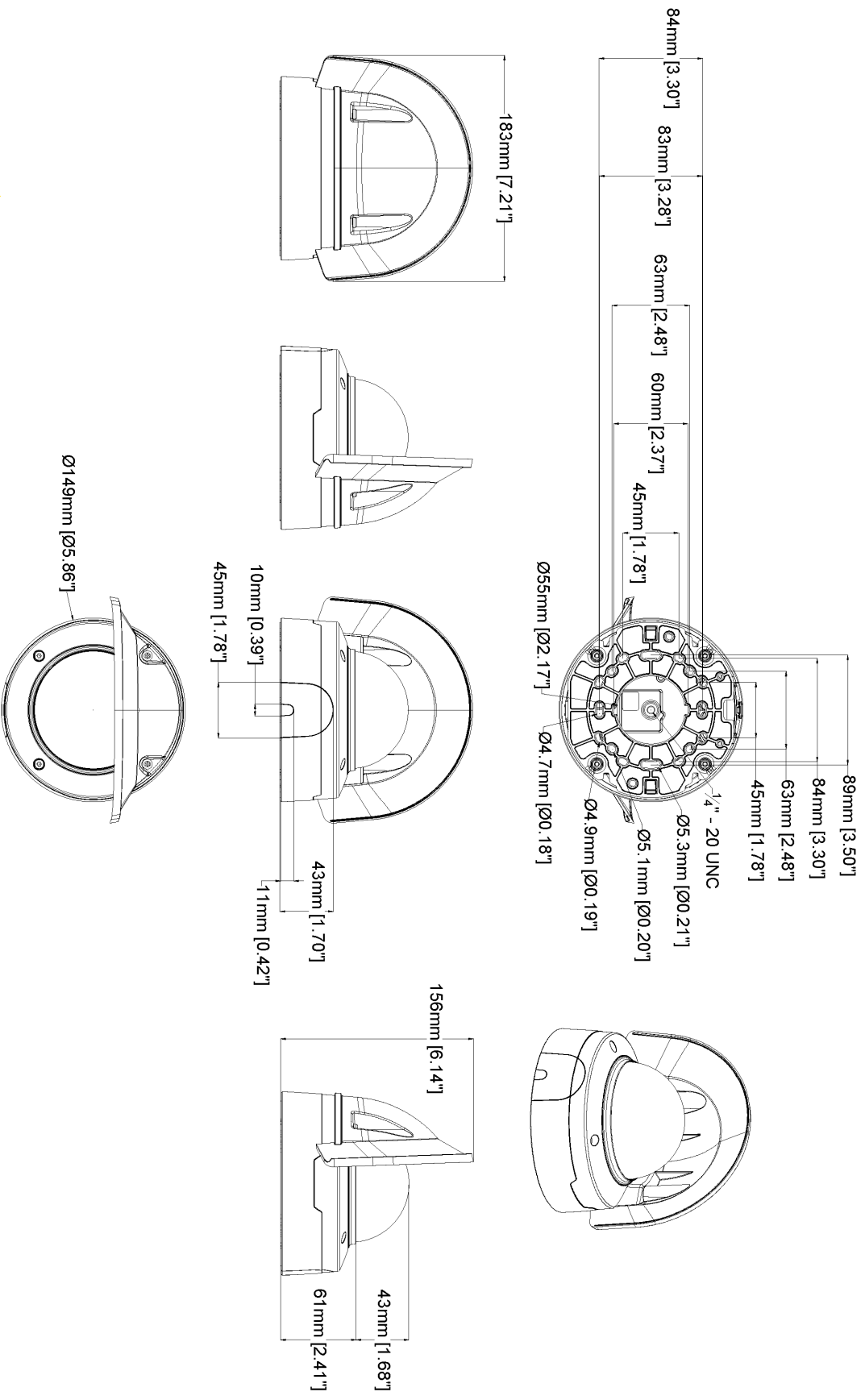
Configurable bit rate

Network	
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS <sup>b</sup> , HTTP/2, TLS <sup>b</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP <sup>c</sup> , SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, DHCPv4/v6, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf), IEEE 802.1X (EAP-TLS), IEEE 802.1AR
System integration	
Application Programming Interface	Open API for software integration, including VAPIX <sup>®</sup> , metadata, and AXIS Camera Application Platform (ACAP); specifications at <a href="https://axis.com/developer-community">axis.com/developer-community</a> . ACAP includes Native SDK and Computer Vision SDK. One-click cloud connection ONVIF <sup>®</sup> Profile G, ONVIF <sup>®</sup> Profile M, ONVIF <sup>®</sup> Profile S, and ONVIF <sup>®</sup> Profile T, specifications at <a href="https://onvif.org">onvif.org</a> Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.
Video management systems	Compatible with 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>
Onscreen controls	Day/night shift Defogging Wide dynamic range Video streaming indicator IR illumination Heater
Event conditions	Application Audio: audio clip playing Device status: above operating temperature, above or below operating temperature, below operating temperature, within operating temperature, IP address removed, new IP address, network lost, system ready, ring power overcurrent protection, live stream active Digital audio input status Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input, manual trigger, virtual input, digital output MQTT: stateless Scheduled and recurring: schedule Video: average bitrate degradation, day-night mode, tampering
Event actions	Audio clips: play, stop Day-night mode Defog I/O: toggle I/O once, toggle I/O while the rule is active Illumination: use lights, use lights while the rule is active MQTT: publish Notification: HTTP, HTTPS, TCP and email Overlay text Recordings: SD card and network share SNMP traps: send, send while the rule is active Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email WDR mode
Built-in installation aids	Pixel counter, remote zoom and focus, straighten image, level grid
Analytics	
Metadata	Object data: Classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates Confidence, position Event data: Producer reference, scenarios, trigger conditions
Applications	Included AXIS License Plate Verifier AXIS Video Motion Detection, active tampering alarm, audio detection Supported Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="https://axis.com/acap">axis.com/acap</a>
Approvals	
Product markings	CSA, UL/cUL, BIS, UKCA, CE, KC, EAC, VCCI, RCM

<b>Supply chain</b>	TAA compliant
<b>EMC</b>	CISPR 35, CISPR 32 Class A, EN 55035, EN 55032 Class A, EN 50121-4, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2 Australia/New Zealand: RCM AS/NZS CISPR 32 Class A Canada: ICES-3(A)/NMB-3(A) Japan: VCCI Class A Korea: KS C 9835, KS C 9832 Class A USA: FCC Part 15 Subpart B Class A Railway: IEC 62236-4
<b>Safety</b>	CAN/CSA C22.2 No. 62368-1 ed. 3, IEC/EN/UL 62368-1 ed. 3, IEC/EN 62471 risk group exempt, IS 13252
<b>Environment</b>	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, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA TS 2 (2.2.7-2.2.9)
<b>Network</b>	NIST SP500-267
<b>Cybersecurity</b>	
<b>Edge security</b>	<b>Software:</b> Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption <b>Hardware:</b> 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) <sup>b</sup> , IEEE 802.1AR, HTTPS/HSTS <sup>b</sup> , TLS v1.2/v1.3 <sup>b</sup> , 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-, NEMA 4X- and IK10-rated Polycarbonate hard-coated dome Polycarbonate (PC) casing and weathershield Color: white NCS S 1002-B For repainting instructions, go to the product's support page. For information about the impact on warranty, go to <a href="https://axis.com/warranty-implication-when-repainting">axis.com/warranty-implication-when-repainting</a> .
<b>Mounting</b>	Mounting bracket with junction box holes (double-gang, single-gang, 4" square, and 4" octagon) ¼"-20 UNC tripod screw thread
<b>Power</b>	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 4.8 W, max 10.7 W
<b>Connectors</b>	Network: RJ45 10BASE-T/100BASE-TX PoE I/O: 4-pin 2.5 mm terminal block for 1 digital input and 1 output (12 V DC output, max. load 25 mA) Audio: 4-pin 2.5 mm terminal block for audio in and out
<b>IR illumination</b>	Optimized IR with power-efficient, long-life 850 nm IR LEDs Range of reach 40 m (130 ft) or more depending on the scene

<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 50 °C (-40 °F to 122 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Start-up temperature: -30 °C to 50 °C (-22 °F to 122 °F) Humidity 10–100% RH (non-condensing)
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
<b>Dimensions</b>	<b>Without weathershield:</b> Height: 104 mm (4.09 in) ø 149 mm (5.87 in)
<b>Weight</b>	<b>With weathershield:</b> 800 g (1.8 lb)
<b>Box content</b>	Camera, weathershield, installation guide, drill template, RESISTORX® TR20 screw bit, terminal block connector, connector guard, cable gaskets, Windows® decoder 1-user license, owner authentication key
<b>Optional accessories</b>	AXIS TP3201-E Recessed Mount, AXIS TP3103-E Pendant Kit, AXIS T94K01D Pendant Kit, AXIS T8355 Digital Microphone 3.5 mm, AXIS Surveillance Cards For more accessories, go to <a href="https://axis.com/products/axis-p3265-lve-3/support#compatible-products">axis.com/products/axis-p3265-lve-3/support#compatible-products</a>
<b>System tools</b>	AXIS Site Designer, AXIS Device Manager, product selector, accessory selector, lens calculator Available at <a href="https://axis.com">axis.com</a>
<b>Languages</b>	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese
<b>Warranty</b>	5-year warranty, see <a href="https://axis.com/warranty">axis.com/warranty</a>
<b>Part numbers</b>	Available at <a href="https://axis.com/products/axis-p3265-lve-3#how-to-buy">axis.com/products/axis-p3265-lve-3#how-to-buy</a>
<b>Sustainability</b>	
<b>Substance control</b>	PVC free in accordance with JEDEC/ECA Standard JS709 RoHS in accordance with EU RoHS Directive 2011/65/EU/ and EN 63000:2018 REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see <a href="https://echa.europa.eu">echa.europa.eu</a>
<b>Materials</b>	Screened for conflict minerals in accordance with OECD guidelines To read more about sustainability at Axis, go to <a href="https://axis.com/about-axis/sustainability">axis.com/about-axis/sustainability</a>
<b>Environmental responsibility</b>	<a href="https://axis.com/environmental-responsibility">axis.com/environmental-responsibility</a> Axis Communications is a signatory of the UN Global Compact, read more at <a href="https://unglobalcompact.org">unglobalcompact.org</a>
<p>a. We recommend a maximum of 3 unique video streams per camera or channel, for optimized user experience, network bandwidth, and storage utilization. A unique video stream can be served to many video clients in the network using multicast or unicast transport method via built-in stream reuse functionality.</p> <p>b. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<a href="https://openssl.org">openssl.org</a>), and cryptographic software written by Eric Young (<a href="mailto:ey@cryptsoft.com">ey@cryptsoft.com</a>).</p>	

# Dimension drawing



## AXIS P3265-LVE-3 License Plate Verifier Kit

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Revision	v.01	Revision date	2023-04-05
Paper size	A4	Release date	2023-04-05
Created by	MS	Scale	1:4

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## Key features and technologies

### Axis Edge Vault

Axis Edge Vault is the hardware-based cybersecurity platform that safeguards the Axis device. It offers features to guarantee the device's identity and integrity and to protect your sensitive information from unauthorized access.

Establishing the root of trust starts at the device's boot process. In Axis devices, the hardware-based mechanism **secure boot** verifies the operating system (AXIS OS) that the device is booting from. AXIS OS, in turn, is cryptographically signed (**signed firmware**) during the build process. Secure boot and signed firmware tie into each other and ensure that the firmware has not been tampered with during the lifecycle of the device and that the device only boots from authorized firmware. This creates an unbroken chain of cryptographically validated software for the chain of trust that all secure operations depend on.

From a security aspect, the **secure keystore** is the critical building-block for protecting cryptographic information used for secure communication (IEEE 802.1X, HTTPS, Axis device ID, access control keys etc.) against malicious extraction in the event of a security breach. The secure keystore is provided through a Common Criteria and/or FIPS 140 certified hardware-based cryptographic computing module. Depending on security requirements, an Axis device can have either one or multiple such modules, like a TPM 2.0 (Trusted Platform Module) or a secure element, and/or a system-on-chip (SoC) embedded Trusted Execution Environment (TEE).

**Signed video** ensures that video evidence can be verified as untampered without proving the chain of custody of the video file. Each camera uses its unique video signing key, which is securely stored in the secure keystore, to add a signature into the video stream. This allows video to be traced back to the Axis camera from where it originated, so it's possible to verify that the footage has not been tampered with after it left the camera.

To read more about Axis Edge Vault, go to [axis.com/solutions/edge-vault](https://axis.com/solutions/edge-vault).

### Lightfinder

The Axis Lightfinder technology delivers high-resolution, full-color video with a minimum of motion blur even in near darkness. Because it strips away noise, Lightfinder makes dark areas in a scene visible and captures details in very low light. Cameras with Lightfinder discern color in low light better than the human eye. In surveillance, color may be the critical factor to identify a person, an object, or a vehicle.

### OptimizedIR

Axis OptimizedIR provides a unique and powerful combination of camera intelligence and sophisticated LED technology, resulting in our most advanced camera-integrated IR solutions for complete darkness. In our pan-tilt-zoom (PTZ) cameras with OptimizedIR, the IR beam automatically adapts and becomes wider or narrower as the camera zooms in and out to make sure that the entire field of view is always evenly illuminated.

### Zipstream

The Axis Zipstream technology preserves all the important forensic in the video stream while lowering bandwidth and storage requirements by an average of 50%. Zipstream also includes three intelligent algorithms, which ensure that relevant forensic information is identified, recorded, and sent in full resolution and frame rate.

For more information, see [axis.com/glossary](https://axis.com/glossary)