

AXIS P1486-LE Global Shutter Camera

3 MP fast, efficient, high-quality video

Using global shutter technology with built-in continuous and strobing IR illumination, AXIS P1486-LE delivers clear, low-distortion images of fast-moving objects – even in complete darkness. It offers excellent forensic usability at 3 MP up to 60 fps, or 270 fps in lower resolutions. Built on ARTPEC-9, it supports advanced AI-powered edge analytics such as AXIS Object Analytics and AXIS Image Health Analytics. Ideal for urban traffic monitoring and law enforcement, this robust, impact-resistant camera offers easy installation, maintenance, and operations. Axis Edge Vault offers FIPS 140-3 Level 3 certified secure key storage. It features sync output for connecting an additional third-party strobing illuminator.

- > **1/1.8" CMOS global shutter image sensor**
- > **Built-in continuous and strobing IR illumination**
- > **Advanced AI-powered video analytics**
- > **Robust with built-in cybersecurity**
- > **Sync output for 3rd-party strobe lights**



AXIS P1486-LE Global Shutter Camera

Camera

Image sensor

1/1.8" progressive scan RGB CMOS
Global shutter
Pixel size 3.45 µm

Lens

Varifocal, 10–40 mm, F1.3–1.4
Horizontal field of view 42°–11°
Vertical field of view 30°–6°
Minimum focus distance: 3 m (9.8 ft)
P-iris lens, IR corrected

Day and night

Automatic IR-cut filter
Hybrid IR filter

Minimum illumination

0 lux with IR illumination on
Color: 0.1 lux, at 50 IRE F1.3
B/W: 0.02 lux, at 50 IRE F1.3

Shutter speed

With Forensic WDR: 1/9500 s to 1/21 s
No WDR: 1/21500 s to 1/21 s
Binned mode: 1/200000 s to 1/4 s

System on chip (SoC)

Model

ARTPEC-9

Memory

2 GB RAM, 8 GB 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
AV1
Motion JPEG

Resolution

16:9: 1920x1080 to 640x360
4:3: 2048x1536 to 320x240

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
Cropped mode: Up to 200 fps (50/60Hz), 1280x720
Binned mode: Up to 270 fps (50/60Hz), 1024x768

Video streaming

Up to 20 unique and configurable video streams⁽¹⁾
Axis Zipstream technology in H.264, H.265, and AV1
Controllable frame rate and bandwidth
VBR/ABR/MBR H.264/H.265/AV1
Low latency mode
Video streaming indicator

Signal-to-noise ratio

>55 dB

WDR

Forensic WDR: Up to 120 dB depending on scene

Multi-view streaming

Up to 8 individually cropped out view areas

Image settings

Saturation, contrast, brightness, sharpness, white balance, day/night threshold, exposure mode, exposure zones, defogging, compression, split stream, orientation: auto, 0°, 90°, 180°, 270° including corridor format, mirroring of images, dynamic text and image overlay, polygon privacy masks, barrel distortion correction
Scene profiles: forensic, vivid, traffic overview, license plate capture
Electronic image stabilization

Image processing

Forensic WDR, Lightfinder 2.0, OptimizedIR

Pan/Tilt/Zoom

Digital PTZ, digital zoom

1. 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.

Audio

Features

Automatic gain control (AGC)
Speaker pairing, microphone pairing

Streaming

Configurable duplex:
One-way (simplex, half duplex)
Two-way (half duplex, full duplex)

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

Output

Output through network speaker pairing

Encoding

24bit LPCM, AAC-LC 8/16/32/44.1/48 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⁽²⁾, HTTP/2, TLS⁽²⁾, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, PTP, 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®, metadata and AXIS Camera Application Platform (ACAP); specifications at axis.com/developer-community.

One-click cloud connection

ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S and ONVIF® Profile T, specification at onvif.org

Support for Voice over IP (VoIP) through the Session Initiation Protocol (SIP), using peer-to-peer (P2P) or Private Branch Exchange (PBX).

Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, and video management software from Axis' partners available at axis.com/vms.

Onscreen controls

Autofocus
Image stabilization
Day/night shift
Defog
Video streaming indicator
Wide dynamic range
IR illumination
Privacy masks
Media clip

Edge-to-edge

Microphone pairing
Radar pairing
Speaker pairing
Siren and light pairing

Event conditions

Application
Device status: above/below/within operating temperature, casing open, fan failure, IP address blocked/removed, live stream active, network lost, new IP address, ring power overcurrent protection, shock detected, system ready
Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay
Edge storage: recording ongoing, storage disruption, storage health issues detected
I/O: digital input is active, digital output is active, manual trigger, virtual input is active
MQTT: MQTT client connected, stateless
Scheduled and recurring: schedule
Video: average bitrate degradation, day-night mode, live stream open, tampering

Event actions

Day-night mode
Audio clips: play, stop
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: send MQTT publish message
Notification: HTTP, HTTPS, TCP and email
Overlay text
Recordings: record video, record video while the rule is active
SNMP trap messages: send, send while the rule is active
Images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email
WDR mode

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (ey@cryptosoft.com).

Built-in installation aids

Pixel counter, remote zoom and focus, straighten image, traffic camera installation assistant

Analytics

Applications

Included

AXIS Object Analytics, AXIS Scene Metadata, AXIS Image Health Analytics, AXIS Video Motion Detection

Supported

AXIS Perimeter Defender, AXIS License Plate Verifier
Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap

AXIS Object Analytics

Object classes: humans, vehicles (types: cars, buses, trucks, bikes, other)

Scenarios: line crossing, object in area, time in area, crossline counting, occupancy in area, tailgating detection, PPE monitoring^{BETA}, motion in area, motion line crossing

Up to 10 scenarios

Other features: triggered objects visualized with trajectories, color-coded bounding boxes and tables

Polygon include/exclude areas

Perspective configuration

ONVIF Motion Alarm event

AXIS Image Health Analytics

Detection settings:

Tampering: blocked image, redirected image

Image degradation: blurred image, underexposed image

Other features: sensitivity, validation period

AXIS Scene Metadata

Object classes: humans, faces, vehicles (types: cars, buses, trucks, bikes), license plates

Approvals

Product markings

CE, FCC, ICES, KC, RCM, UL, VCC, WEEE

Supply chain

TAA compliant

EMC

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

Safety

CAN/CSA C22.2 No. 62368-1 ed. 3, IEC/EN/UL 62368-1 ed. 3, IEC/EN 62471 risk group, IS 13252

Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC/EN 60529 IP66/IP67, IEC/EN 62262, IK10, ISO 21207 (Method B), Type 4X, NEMA 250 TS 2 (2.2.7-2.2.9)

Network

IPv6 USGv6, NIST SP500-267

Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS-140

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, Axis Cryptographic Module (FIPS 140-2 level 1)

Hardware: Axis Edge Vault cybersecurity platform
Secure keystore: Secure element (CC EAL 6+), system-on-chip security (TEE), Axis device ID, secure keystore, signed video, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)

Axis device ID, secure keystore, signed video, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)

Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)⁽³⁾, IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS⁽³⁾, TLS v1.2/v1.3⁽³⁾, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall

3. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (ey@cryptosoft.com).

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

Aluminum and plastic casing

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 axis.com/warranty-implication-when-repainting.

Power

Power over Ethernet IEEE 802.3af/802.3at, Type 1 Class 3, max 12.95 W, 10–28 V DC, max 13 W

Connectors

Network: Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T

Audio: 3.5 mm mic/line in

I/O: Terminal block for 1 supervised alarm input and 1 output (12 V DC output, max. load 25 mA)

Power: DC input

Sync out (12 V DC output, max. load 25 mA)

IR illumination

OptimizedIR with power-efficient, long-life 850 nm IR LEDs

Range of reach 80 m (262 ft) or more depending on the scene

Continuous and Strobing IR light

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

Temperature: -40 °C to 60 °C (-40 °F to 140 °F)

Maximum temperature according to NEMA TS2 (2.2.7): 74 °C (165 °F)

Start-up temperature: -40 °C

Humidity 10–100% RH (condensing)

Wind load (sustained): 60 m/s (134 mph)

Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)

Humidity 5–95% RH (non-condensing)

Dimensions

For the overall product dimensions, see the dimension drawing in this datasheet.

Effective Projected Area (EPA): 0.024 m² (0.26 ft²)

Weight

1420 g (3.1 lb)

Box content

Camera, weathershield, installation guide, terminal block connector, connector guard, cable gaskets, owner authentication key

System tools

AXIS Site Designer, AXIS Device Manager, product selector, accessory selector, lens calculator

Available at axis.com

Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Warranty

5-year warranty, see axis.com/warranty

Software support

New feature development until 2030 (AXIS OS 12, 13 and 14)

Support until 2035-12-31 (AXIS OS LTS 2030–2035)

Read more about the AXIS OS lifecycle at help.axis.com/axis-os

Part numbers

Available at axis.com/products/axis-p1486-le#part-numbers

Optional accessories

Installation

AXIS T8415 Wireless Installation Tool

Mounting

AXIS T91B47 Pole Mount, AXIS T94F01P Conduit Back Box, AXIS TM4101 Pendant Kit

Storage

AXIS Surveillance Cards

Available at axis.com/products/axis-p1486-le#part-numbers

Sustainability

Substance control

PVC free, BFR/CFR 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 axis.com/partner.

Materials

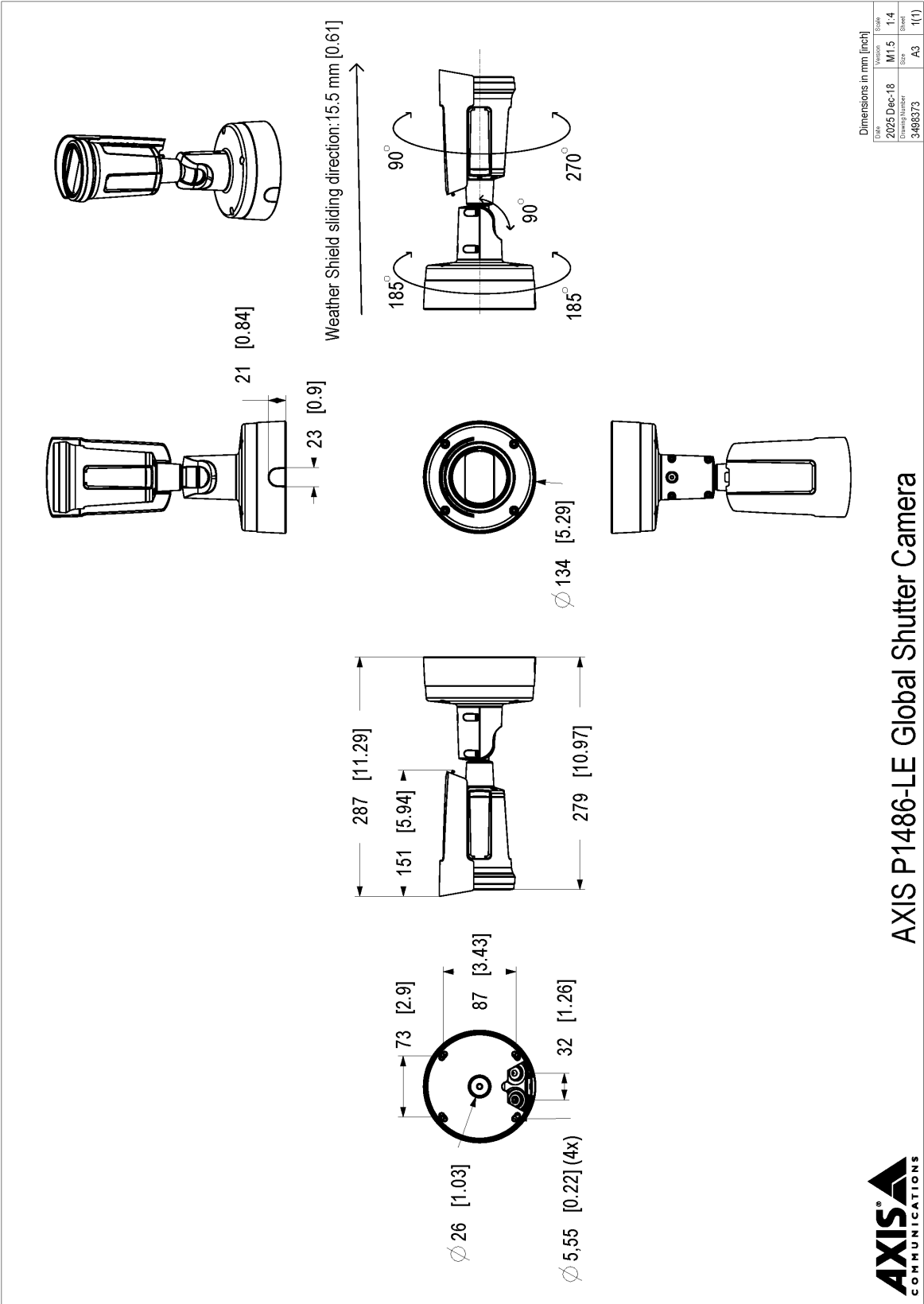
Screened for conflict minerals in accordance with OECD guidelines

To read more about sustainability at Axis, go to axis.com/about-axis/sustainability

Environmental responsibility

axis.com/environmental-responsibility

Axis Communications is a signatory of the UN Global Compact, read more at unglobalcompact.org



Highlighted capabilities

AV1

AV1 is a modern video encoding standard optimized for video transmission over the internet by Alliance for Open Media (AoM). It was designed to provide better compression efficiency than older codecs including H.264 (also known as AVC) and H.265 (HEVC), while being royalty-free and open-source.

stabilization relies on different algorithms for modeling camera motion, which are used to correct the images.

Axis Edge Vault

Axis Edge Vault is the hardware-based cybersecurity platform that safeguards the Axis device. It forms the foundation that all secure operations depend on and offer features to protect the device's identity, safeguard its integrity and protect sensitive information from unauthorized access. For instance, **secure boot** ensures that a device can boot only with **signed OS**, which prevents physical supply chain tampering. With signed OS, the device is also able to validate new device software before accepting to install it. And 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 and secure connections are provided through a Common Criteria or FIPS 140 certified hardware-based cryptographic computing module.

Furthermore, signed video ensures that video evidence can be verified as untampered. Each camera uses its unique video signing key, which is securely stored in the secure keystore, to add a signature into the video stream allowing video to be traced back to the Axis camera from where it originated.

To read more about Axis Edge Vault, go to axis.com/solutions/edge-vault.

AXIS Object Analytics

AXIS Object Analytics is a preinstalled, multifeatured video analytics that detects and classifies humans, vehicles, and types of vehicles. Thanks to AI-based algorithms and behavioral conditions, it analyzes the scene and their spatial behavior within – all tailored to your specific needs. Scalable and edge-based, it requires minimum effort to set up and supports various scenarios running simultaneously.

Electronic image stabilization

Electronic image stabilization (EIS) provides smooth video in situations where a camera is subject to vibrations. Built-in gyroscopic sensors continuously detect the camera's movements and vibrations, and they automatically adjust the frame to ensure you always capture the details you need. Electronic image