

# **AXIS P3935-LR Network Camera**

For advanced indoor surveillance onboard trains and buses with IR

Specifically designed for indoor surveillance for trains and buses, AXIS P3935-LR complies with all relevant transportation industry regulations including EN50155, EN45545, and NFPA 130. Featuring Axis Lightfinder and Axis Forensic WDR, it delivers true colors and great detail in challenging light or near darkness. It includes built-in invisible IR LEDs (940 nm) for video surveillance in complete darkness. Enclosed in an IK10-, IP66-, IP67-rated metal casing, this robust, vandal-resistant camera features a built-in microphone for audio surveillance and detection. Furthermore, enhanced security features prevent unauthorized access and safeguard your system.

- > Vandal-resistant, metal casing
- > Indoor camera
- > Complies with EN50155, EN45545, and NFPA 130
- > Lightfinder and Forensic WDR
- > Invisible IR LEDs, built-in microphone, and EIS









## **AXIS P3935-LR Network Camera**

#### **Variants**

AXIS P3935-LR RJ45 AXIS P3935-LR M12

## Camera

#### **Image sensor**

1/2.9" Progressive scan RGB CMOS

#### Lens

2.8 mm, F1.6

Horizontal field of view: 110° Vertical field of view: 62° M12 mount, fixed iris

See Optional accessories for exchangeable lenses

## Day and night

Automatically removable infrared-cut filter

#### Minimum illumination

Color: 0.06 lux at 30 IRE F1.6

B/W: 0.01 lux at 30 IRE F1.6, 0 lux with IR illumination

on

Color: 0.12 lux at 50 IRE F1.6

B/W: 0.02 lux at 50 IRE F1.6, 0 lux with IR illumination

on

# Shutter speed

1/33500 s to 2 s

## Camera adjustment

Pan: ±30° Tilt: 15-90° Rotation: ±175°

# System on chip (SoC)

#### Model

ARTPEC-7

### Memory

1 GB 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

1280x960 to 160x120 1920x1080 to 160x90

## **WDR**

Forensic WDR

#### Frame rate

Up to 25/30 fps (50/60 Hz) in all resolutions 45 fps in 720p

Capture mode 2MP 1920x1080 (16:9) @25/30 fps Capture mode 1MP 1280x720 (16:9) @45 fps

## 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 and H.265
Video streaming indicator
Low latency mode

## Multi-view streaming

Up to 8 individually cropped out view areas

### Image settings

Compression, brightness, sharpness, contrast, white balance, Forensic WDR, exposure control, exposure zones, fine tuning of behavior at low light, rotation: 0°, 90°, 180°, 270° including Corridor Format, dynamic overlay, 20 individual polygonal privacy mask, mirroring of images, defogging, electronic image stabilization<sup>1</sup> Scene profiles: forensic, vivid, traffic overview

## Pan/Tilt/Zoom

Digital PTZ, preset positions, quard tour, control queue

## **Audio**

# Audio streaming

Audio in, simplex

<sup>1.</sup> Use this function only when camera is directed to capture scenes outside of the vehicle

## Audio encoding

AAC- LC 8/16/32/44.1/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz, LPCM 48 kHz Configurable bit rate

## Audio input/output

External microphone input or line input, built-in microphone

# Network

## **Network protocols**

IPv4, IPv6 USGv6, HTTP, HTTPS<sup>2</sup>, HTTP/2, TLS<sup>2</sup>, 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® and AXIS Camera Application Platform; specifications at axis.com

AXIS Video Hosting System (AVHS) with One-Click Connection

One-click cloud connection

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

### Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at axis.com/vms.

## **Event conditions**

Device status: above operating temperature, above or below operating temperature, below operating temperature, IP address removed, network lost, new IP address, shock detected, storage failure, system ready, within operating temperature

Edge storage: recording ongoing, storage disruption I/O: manual trigger, virtual input

MQTT subscribe

Scheduled and recurring: scheduled event

Video: average bitrate degradation, day-night mode,

live stream open, tampering

### **Event actions**

Day-night mode

Defoa

**Guard tours** 

Upload images or video clips: FTP, HTTP, HTTPS, SFTP,

email and network share

Notification: HTTP, HTTPS, TCP and email

Overlay text Preset positions

Record video: SD card and network share

SNMP trap messages

WDR mode MQTT publish

## Data streaming

Event data

#### **Built-in installation aids**

Pixel counter

# **Analytics**

# **Applications**

Included

AXIS Motion Guard, AXIS Fence Guard, AXIS Loitering Guard

AXIS Video Motion Detection, active tampering alarm<sup>3</sup>, blocked view detection<sup>4</sup>, shock detection, audio detection

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

# Cybersecurity

## **Edge security**

Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Secure boot

### **Network security**

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

<sup>2.</sup> 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).

<sup>3.</sup> For detection of tampering attempts in static and non-crowded scenes.

<sup>4.</sup> For detection of tampering attempts in onboard environments.

### **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

IP66/67-, NEMA 250 4X- and IK10-rated aluminum casing, polycarbonate clear dome

## Sustainability

PVC free

## Mounting

Inside vehicles and rolling stock

#### Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1

IR illumination on: typical 6.6 W, max 11.8 W

#### **Connectors**

RJ45: male, 10BASE-T/100BASE-TX

M12: female, rugged, D-coded with rotatable coupling nut

All connectors support PoE

3.5 mm audio in connector, mono

I/O 4-pin, 1 input, 1 output + 12 V DC/15 mA

#### IR illumination

OptimizedIR with power-efficient, long-life 940 nm IR

Range of reach 15 m (49 ft) or more depending on the scene

## Storage

Support for microSD/microSDHC/microSDXC card with UHS Speed Class U1

Support for SD card encryption (AES-XTS-Plain64 256bit)

Support for recording to network-attached storage (NAS)

For SD card and NAS recommendations see axis.com

## Operating conditions

Normal, IR off: -40 °C to 55°C (-40 °F to 131°F) Normal, IR on: -40 °C to 45°C (-22 °F to 113°F)

Maximum (intermittent): 70 °C (158 °F)

Arctic Temperature Control: start-up at -40 °C (-40 °F)

Humidity: 10-100% RH (condensing)

### Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)

## **Approvals**

**EMC** 

EN 55032 Class A, EN 55035, 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, KCC KN32 Class A, KN35, EN 50121-4, EN 50121-3-2, IEC 62236-4, ECE R10 rev.06 (E approval), EN 50498 Safety

IEC/EN/UL 62368-1, CAN/CSA C22.2 No. 62368-1, EN 45545-2, UN ECE R118, NFPA 130, IEC 62471, IS 13252

#### **Environment**

IEC/EN 61373 Category 1 Class B, IEC/EN 60529 IP66, IEC/EN 60529 IP67, parts of

NEMA 250 Type 4X (ingress of water and gasket test), IEC/EN 62262 IK10,

IEC 60721-3-5 Class 5M3 (vibration and shock). EN 50155:2021 OT2/ST2, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-27, IEC 60068-2-64, IEC 60068-2-78

Network

NIST SP500-267

#### **Dimensions**

Height: 49.4 mm (1.94 in), ø 110 mm (4.33 in)

### Weight

RJ45: 400 q (0.88 lb) M12: 410 q (0.90 lb)

#### Included accessories

Installation guide, Windows® decoder 1-user license, drill hole template, lens tool, Resistorx® L-key

### **Optional accessories**

## Lenses

Lens M12 2.1 mm F1.8 IR: horizontal field of view 145° Lens M12 3.6 mm F1.8 IR: horizontal field of view 87° Lens M12 6 mm, F1.9 IR: horizontal field of view 56° Lens M12 8 mm F1.8 IR: horizontal field of view 40° Other

AXIS T94D02S Curved Mount Bracket, network coupler IP66, network cable coupler indoor For more accessories, see axis.com

WWW. CXIS. COM T10137577/EN/M34.2/202511

## Languages

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

# Warranty

5-year warranty, see axis.com/warranty

