

# AXIS I8016-LVE Network Video Intercom

## Compact and robust video intercom

AXIS I8016-LVE Network Video Intercom is a compact and highly robust network intercom designed for two-way communication, video identification, and remote entry control. It offers 5 MP resolution with invisible IR night vision, and exceptional audio volume with echo and noise cancellation to ensure reliable 24/7 identification even in the most demanding situations. Based on open IP standards and interfaces, this network intercom offers great integration possibilities and is a perfect complement to any video surveillance system. Furthermore, it features multiple inputs and outputs for remote control of door locks and other equipment.

- > **High-quality audio and video**
- > **Easy installation with PoE**
- > **Open interface with IP phone integration, SIP support**
- > **Anti-ligature, vandal-resistant IK10-rated**
- > **IP66/IP69-rated with wall-mount**



# AXIS I8016-LVE Network Video Intercom

## Camera

### Image sensor

1/2.7" progressive scan RGB CMOS

### Lens

1.95 mm, F2.2

Horizontal field of view: 150°

Vertical field of view: 117°

M12 mount, fixed iris

### Day and night

Automatically removable infrared-cut filter

### Minimum illumination

Color: 0.3 lux at 50 IRE, F2.2

B/W: 0.00 lux at 50 IRE, F2.2, with IR illumination on

### Shutter speed

1/50000 s to 1/5 s

## System on chip (SoC)

### Model

ARTPEC-7

### Memory

2048 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

2592x1944 240x160

### Frame rate

Up to 30/25 fps (60/50 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

## Image settings

Saturation, contrast, brightness, sharpness, forensic  
WDR: up to 120 dB depending on scene, white balance,  
day/night threshold, tone mapping, exposure mode,  
exposure zones, defogging, compression, text and image  
overlay, polygon privacy mask

## Audio

### Streaming

Two-way, full duplex

Echo cancellation and noise reduction

### Encoding

24bit LPCM, AAC-LC 8/16 kHz, G.711 PCM 8 kHz, G.726

ADPCM 8 kHz, Opus 8/16 kHz

Configurable bit rate

### Input/output

Line input, line output, built-in microphone (can be  
disabled), built-in speaker, automatic gain control

Built-in speaker

78 dB sound pressure at 1 kHz at 1 m distance (84 dB  
at 0.5 m / 20 in)

## Network

### Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS<sup>1</sup>, HTTP/  
2, TLS<sup>1</sup>, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB,  
SMTP, mDNS (Bonjour), UPnP<sup>®</sup>, SNMP v1/v2c/v3 (MIB-  
II), DNS/DNSv6, DDNS, NTP, PTP, NTS, RTSP, RTP, SRTP/  
RTSPS, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP,  
SSH, NTCIP, SIP, LLDP, Secure syslog (RFC 3164/5424,  
UDP/TCP/TLS), Link-Local address (ZeroConf)

1. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](http://openssl.org)), and cryptographic software written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

## System integration

### Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at [axis.com](http://axis.com)

One-click cloud connection

ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at [onvif.org](http://onvif.org)

### VoIP

Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX

Tested with various SIP software such as Cisco, Bria and Grandstream

Tested with various PBX softwares such as Cisco, Avaya and Asterisk

Supported SIP features: secondary SIP server, IPv6, SRTP, SIPS, SIP TLS, DTMF (RFC2976 and RFC2833), NAT (ICE, STUN, TURN), Contact list, parallel call forking, sequential call forking

Supported codecs: PCMU, PCMA, opus, L16/16000, L16/8000, speex/8000, speex/16000, G.726-32, G.722

### Event triggers

Analytics, external input, edge storage events, virtual inputs through API

Call: DTMF, state, state changes

Detectors: audio detection, live stream accessed, shock detection, tampering, motion alarm

Hardware: Casing open, temperature, relays and outputs, network

Input Signal: digital input port, manual trigger, virtual inputs

MQTT subscribe

Storage: disruption, recording

System: system ready

Time: recurrence, use schedule

PTZ: moving, preset reached

### Event actions

Axis door control

Make call: SIP, API

Terminate call: SIP, API

Record video and audio: 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 and TCP

External output activation, play audio clip, overlay text,

PTZ controls, status LED, WDR mode

MQTT publish

### Data streaming

Event data

## Analytics

### Applications

#### Included

AXIS Image Health Analytics, AXIS Barcode Reader

#### Supported

AXIS Video Motion Detection, AXIS Motion Guard, AXIS Fence Guard, and AXIS Loitering Guard

Support for AXIS Camera Application Platform enabling installation of third-party applications, see [axis.com/acap](http://axis.com/acap)

## Approvals

### EMC

EN 50121-4, EN 55032 Class A, EN 55035,

EN 61000-6-1, EN 61000-6-2, IEC 62236-4

**Australia/New Zealand:** RCM AS/NZS CISPR 32 Class A

**Canada:** ICES-3(A)/NMB-3(A)

**Japan:** VCCI Class A

**Korea:** KC KN32 Class A, KC KN35

**USA:** FCC Part 15 Subpart B Class A

### Safety

CAN/CSA-C22.2 No. 60950-22,

CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1,

IEC/EN/UL 60950-22, IEC 62471

### Environment

IEC 60068-2-27, IEC 60068-2-6, IEC/EN 60529 IP66/

IP69, IEC/EN 62262 IK10, NEMA 250 Type 4X

### Network

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 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, Axis Cryptographic Module (FIPS 140-2 level 1), AES-XTS-Plain64 256bit SD card encryption  
**Hardware:** Axis Edge Vault cybersecurity platform TPM 2.0 (CC EAL4+, FIPS 140-2 Level 2), secure element (CC EAL 6+), Axis device ID, secure boot

### Network security

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

### 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](http://axis.com/support/cybersecurity/resources)

To read more about Axis cybersecurity support, go to [axis.com/cybersecurity](http://axis.com/cybersecurity)

## General

### Casing

Anti-ligature, IP66/IP69-, NEMA 4X- and IK10-rated  
Stainless steel, zink, and plastic casing

Color: black NCS S 9000-N

For repainting instructions of skin cover or casing and  
impact on warranty, contact your Axis partner.

This product can be repainted

### Sustainability

PVC free

### Mounting

Recessed mounting using US 2-Gang-, 4 inch square  
installation boxes or AXIS TI8202 Recessed Mount  
Wall Mounting using AXIS TI8602 Wall Mount  
Wall Mounting with conduit pipe using AXIS TI8602  
Wall Mount and AXIS TI8603 Conduit Adapter

### Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1  
Class 3  
Typical 4.7 W, max 12.7 W  
Relay rating: 30 V, 0.7 A

### Connectors

Shielded RJ45 10BASE-T/100BASE-TX PoE  
I/O: 6-pin terminal block for 2 inputs/outputs, +12 V  
400 mA supply, and 1 relay  
4-pin terminal block for audio input and output

### IR illumination

Power-efficient, long-life 940 nm IR LEDs  
Range of reach 5 m (16 ft) or more depending on the  
scene

### Storage

Support for microSD/microSDHC/microSDXC card and  
encryption  
Recording to network-attached storage (NAS)  
For SD card and NAS recommendations see [axis.com](http://axis.com)

### Operating conditions

-40 °C to 60 °C (-40 °F to 140 °F)  
Start-up temperature: -40 °C (-40 °F)  
Humidity 10–100% RH (condensing)

### Storage conditions

-40 °C to 65 °C (-40 °F to 149 °F)  
Humidity 5–95% RH (non-condensing)

### Dimensions

Height: 124 mm (4.9 in)  
Width: 124 mm (4.9 in)

### Weight

900 g (2.0 lb)

### Included accessories

Installation guide, Windows® decoder 1-user license,  
terminal block connector, Allen key (Resitorx 10)

### Optional accessories

AXIS TI8202 Recessed Mount  
AXIS TI8602 Wall Mount  
AXIS TI8603 Conduit Adapter  
AXIS TI8902 Glass Replacement Kit  
AXIS TI8901 Face Plate Replacement  
AXIS A9801 Security Relay  
AXIS TI8904 Induction Loop  
For more accessories, see [axis.com](http://axis.com)

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](http://openssl.org)), and cryptographic software written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

## **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](http://axis.com/vms).

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## **Languages**

English, German, French, Spanish, Italian

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## **Warranty**

5-year warranty, see [axis.com/warranty](http://axis.com/warranty)