

## AXIS I7020 Network Intercom

Sleek indoor intercom for clean environments

This indoor intercom delivers excellent audio quality with echo cancellation and noise reduction. Extensively tested for chemical detergents, it can withstand daily wipe-downs with strong cleaning fluids. Additionally, this device meets the requirements of ISO 14644-1 to ensure air cleanliness. It's easy to install and fits into 2-gang installation boxes. It's also easy to integrate with Axis and third-party VMSs. Furthermore, Axis Edge Vault, a hardware-based cybersecurity platform, safeguards the device and protects sensitive information from unauthorized access.

- > [Superior echo cancellation, and noise reduction](#)
- > [ISO 14644-1 Class 3-9 Certified](#)
- > [Compatible with 2-gang installation boxes](#)
- > [Open platform for easy integration](#)
- > [Built-in cybersecurity with Axis Edge Vault](#)



# SIP

# AXIS I7020 Network Intercom

<b>System on chip (SoC)</b>	
Model	CV25
Memory	2 GB RAM, 1 GB Flash
<b>Audio</b>	
Audio features	Echo cancellation, noise reduction, wind reduction, beamforming
Audio streaming	Two-way (full duplex)
Audio input	2x built-in microphones (can be disabled), line input
Audio output	Built-in speaker – max 85 dB SPL (at 1 m / 39 in) Line output
Audio encoding	LPCM 16 kHz, AAC 8/16 kHz, G.711 A-law, G.711 $\mu$ -law, G.722, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bitrate
<b>Lock control</b>	
Lock integration	Integration with AXIS A9801 Security Relay: 350 mA at 12 V DC Integration with OSDP reader Integrated entry list with up to 50 credentials
<b>Network</b>	
Network protocols	IPv4, IPv6, USGv6, ICMPv4/ICMPv6, HTTP, HTTPS <sup>a</sup> , HTTP/2, TLS <sup>a</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP <sup>b</sup> , 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), IEEE 802.1X (EAP-TLS), IEEE 802.1AR
<b>System integration</b>	
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> . One-click cloud connection
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 and Grandstream Tested with various PBX software such as Cisco, Avaya and Asterisk AXIS Parallel Call Forking, AXIS Sequential Call Forking 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
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>
Edge-to-edge	Camera pairing
Event conditions	Application Audio: audio detection, audio clip playing Call: state, state change Device status: above/below/within operating temperature, casing open, IP address blocked/removed, live stream active, new IP address, network lost, system ready, shock detected, RFID tag detected Digital audio input status Edge storage: recording ongoing, storage disruption, storage health issues detected I/O: digital input/output, manual trigger, relay or digital output, virtual input MQTT: subscribe Scheduled and recurring: schedule
Event actions	Audio clips: play, stop Calls: answer call, end call, make call I/O: toggle I/O once, toggle I/O while the rule is active LEDs: flash status LED, flash status LED while the rule is active MQTT: publish Notification: HTTP, HTTPS, TCP and email Recordings: SD card and network share Security: erase configuration SNMP traps: send, send while the rule is active
<b>Analytics</b>	
Applications	Included Active tampering alarm, audio detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see <a href="https://axis.com/acap">axis.com/acap</a>
<b>Approvals</b>	
Product markings	CSA, UL/cUL, CE, KC, VCCI, RCM
Supply chain	TAA compliant
EMC	CISPR 35, CISPR 32 Class A, EN 55035, EN 55032 Class A, EN 61000-6-1, EN 61000-6-2 <b>Australia/New Zealand:</b> RCM AS/NZS CISPR 32 Class A <b>Canada:</b> ICES(A)/NMB(A) <b>Japan:</b> VCCI Class A <b>Korea:</b> KS C 9835, KS C 9832 Class A <b>USA:</b> FCC Part 15 Subpart B Class A
Safety	CAN/CSA C22.2 No. 62368-1 ed. 3, IEC/EN/UL 62368-1 ed. 3
Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC/EN 60529 IP65, ISO 14644-14 grade 3-9
Cybersecurity	ETSI EN 303 645
<b>Cybersecurity</b>	
Edge security	<b>Software:</b> Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection <b>Hardware:</b> Axis Edge Vault cybersecurity platform Secure element (CC EAL 6+), system-on-chip security (TEE), Axis device ID, secure keystore, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)
Network security	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2) <sup>a</sup> , IEEE 802.1AE (MACsec PSK/EAP-TLS), IEEE 802.1AR, HTTPS/HSTS <sup>a</sup> , TLS v1.2/v1.3 <sup>a</sup> , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	<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>	
Casing	IP65- and NEMA 4X-rated Stainless steel and zinc casing Color: grey NCS S 1002-B
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 802.3at Type 2 Class 4 Typical 3 W, max 25.5 W Power out: 4.8 W Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 3 W, max 12.7 W Power out: disabled with PoE Class 3 Relay rating: 30 V, 0.7 A
Connectors	Network: Shielded RJ45 10BASE-T/100BASE-TX/1000BASE-T PoE I/O: Terminal block for two configurable supervised inputs / digital outputs (12 V DC output, max load 50 mA) <sup>b</sup> , and 1 relay Audio: 4-pin terminal block for audio input and output Serial communication: RS485, half duplex/2-wire <sup>b</sup>
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 <a href="https://axis.com">axis.com</a>
Operating conditions	Temperature: 0 °C to 45 °C (32 °F to 113 °F) Humidity: 10–85% RH (condensing)
Storage conditions	Temperature: -40 °C to 65 °C (-40 °F to 149 °F) Humidity: 5–95% RH (non-condensing)

<b>Dimensions</b>	For the overall product dimensions, see the dimension drawing in this datasheet.
<b>Weight</b>	800 g (1.8 lb)
<b>Box content</b>	Intercom, installation guide, RESISTORX® L-key, terminal block connector, owner authentication key
<b>Optional accessories</b>	AXIS TI8202 Recessed Mount AXIS TI8602 Wall Mount AXIS TI8603 Conduit Adapter AXIS TI8906 Glass Replacement Kit AXIS TI8907 Face Plate Replacement AXIS A9801 Security Relay AXIS TI8904 Induction Loop For more accessories, go to <a href="https://axis.com/products/axis-i7020#accessories">axis.com/products/axis-i7020#accessories</a>
<b>System tools</b>	AXIS Site Designer, AXIS Device Manager, product selector, accessory selector 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, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
<b>Warranty</b>	5-year warranty, see <a href="https://axis.com/warranty">axis.com/warranty</a>

**Part numbers** Available at [axis.com/products/axis-i7020#part-numbers](https://axis.com/products/axis-i7020#part-numbers)

### Sustainability

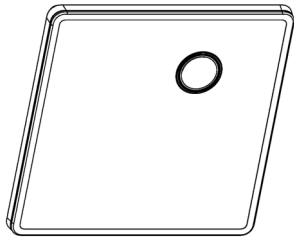
**Substance control** PVC free, BFR/CFR free in accordance with JEDEC/ECA Standard JS709  
 RoHS in accordance with EU RoHS Directive 2011/65/EU/ and EN 63000:2018  
 REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see [echa.europa.eu](https://echa.europa.eu)

**Materials** Renewable carbon-based plastic content: 42% (recycled: 34%, bio-based: 8%)  
 Screened for conflict minerals in accordance with OECD guidelines  
 To read more about sustainability at Axis, go to [axis.com/about-axis/sustainability](https://axis.com/about-axis/sustainability)

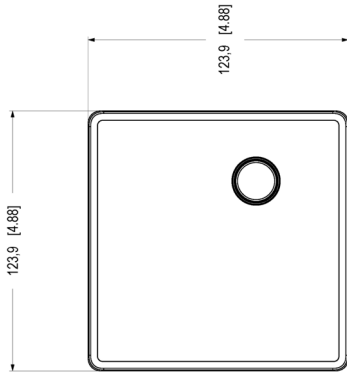
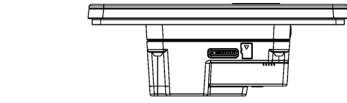
**Environmental responsibility** [axis.com/environmental-responsibility](https://axis.com/environmental-responsibility)  
 Axis Communications is a signatory of the UN Global Compact, read more at [unglobalcompact.org](https://unglobalcompact.org)

- a. *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).*
- b. *One connector for I/O or RS485 usage*

# Dimension drawing

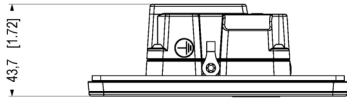


31.2 [1.23]

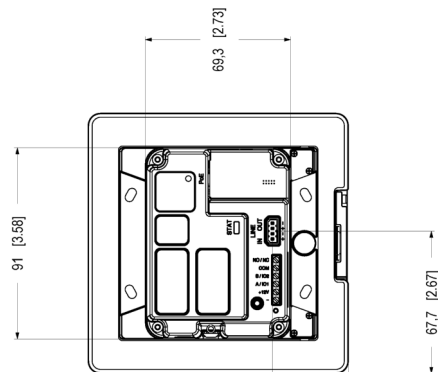


123.9 [4.88]

123.9 [4.88]



43.7 [1.72]



91 [3.58]

68.3 [2.73]

67.7 [2.67]

36.2 [1.42]

Dimensioni in mm [in]			
2010020	M11	L1	
318507	A1	L10	

AXIS 17020 Network Intercom

## Highlighted capabilities

### 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 communica-

tion (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.

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

### Entry list

Entry list enables simple and convenient credential-based management, limited to 50 credentials.