

AXIS A9910 I/O Relay Expansion Module

Expand I/Os with increased flexibility

Enjoy even more I/O functionality with AXIS A9910 I/O Relay Expansion Module. Featuring multi-drop technology, it's possible to connect up to 16 of these expansion modules to one AXIS A9210 device. 128 I/Os and 64 relays using just one PoE cable—no need for an extra network cable drop. This ensures a cost-effective installation and saves you time and effort. Plus, Modbus sensor ports let you integrate environmental sensors such as temperature and humidity sensors.

- > 8 I/O ports with supervised inputs
- > 4 form C relay, wet or dry
- > 4 Modbus sensor ports
- > Supports up to 128 I/Os and 64 relays with one IP connection



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I/O interface

Configurable I/Os

I/O: 8x I/O, configurable inputs or outputs

Digital input: 0 to max 30 V DC, possible to supervise between 0–12 V (4 states)¹

Programmable end-of-line resistors, 1 K, 2.2 K, 4.7 K and 10 K, 1%, 1/4 watt standard

Digital output: Open drain, 0 to max 30 V DC, max 100 mA

Power out I/O: 2x 12 V DC output, combined total max 100 mA

Relays

4x form C relay, NO/NC, max 4 A, 30 V DC

Power out relay: 12/24 V DC, jumper configurable, max 49.6 W

With DC in: combined total max 4 A at 12 V DC, combined total max 2 A at 24 V DC, max 49.6 W

RS485

4x port, half duplex, Modbus⁶

Power out RS485: 4x 12 V DC output, combined total max 2 A

Expansion interface

Expansion IN and Expansion Out interface, multi-drop, qualified up to 16 expansion modules²

Power

Power in: 12–24 V DC, max 90 W

Cable requirements

Wire size for connectors: CSA: AWG 28–16, CUL/UL: AWG 30–14

DC power: AWG 18–16, qualified for up to 3 m (10 ft)

Relay: AWG 18–16, qualified for up to 200 m (656 ft)

I/Os as inputs: AWG 24, qualified for up to 200 m (656 ft)

RS485 data: 1 twisted pair with shield connected to the protected ground, 120 ohm impedance, qualified for up to 1000 m (3281 ft)

RS485 powered by device: AWG 20–16, qualified for up to 200 m (656 ft)³

System integration

Video management systems

Compatible with AXIS Camera Station, video management software from Axis' Application Development Partners available at axis.com/vms

Tamper detection

Tilting, vibration

Approvals

Product markings

CE, RCM, UKCA, UL/cUL, VCCI, WEEE

Supply chain

TAA compliant

EMC

CISPR 35, CISPR 32 Class A, EN 55032 Class A, EN 55035, EN 50130-4⁴, 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

Safety

CAN/CSA C22.2 No. 62368-1 ed. 3
IEC/EN/UL 62368-1 ed. 3, RCM AS/NZS 62368.1:2022, UL 2043, UL 294

Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78

Cybersecurity

Edge security

Software: Signed firmware

Hardware: Secure element (CC EAL 6+), secure keystore, secure boot

Communication

AES-128

1. For more information, go to help.axis.com/axis-a9910

2. For more information, see the installation guide.

3. Depending on the peripheral device's voltage and current input range.

4. Except for pin +12V on connector AUX I/O 1 and AUX I/O 2

Documentation

Axis Vulnerability Management Policy

Axis Security Development Model

To download documents, go to axis.com/support/cybersecurity/resources

To read more about Axis cybersecurity support, go to axis.com/cybersecurity

General

Casing

Steel

Color: white NCS S 1002-B

Mounting

Wall mount

DIN rail mount

Connectors

I/O: Terminal blocks for DC power, inputs/outputs, relay. Detachable and color coded connectors for ease of installation.

Wire size for connectors: CSA: AWG 28–16, CUL/UL: AWG 30–14

Operating conditions

Temperature: –40 °C to 55 °C (–40 °F to 131 °F)

Conditional maximum temperature⁵: 70 °C (158 °F)

Humidity: 10–85% RH (non-condensing)

Storage conditions

Temperature: –40 °C to 70 °C (–40 °F to 158 °F)

Humidity: 5–95% RH (non-condensing)

Dimensions

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

Weight

585 g (1.3 lb)

Box content

Expansion module, installation guide, connector kit (mounted), grounding kit

Optional accessories

AXIS TA1901 DIN Rail Clip

AXIS TA1902 Access Control Connector Kit⁶

AXIS T98A15–VE Surveillance Cabinet⁶

AXIS TQ1808–VE Surveillance Cabinet⁶

AXIS TA9001 Wall Mount Bracket

AXIS TA9901 Cable Strain Relief

For more accessories, go to axis.com/products/axis-a9910

System tools

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

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

Part numbers

Available at axis.com/products/axis-a9910#part-numbers

Sustainability

Substance control

PVC free

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

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

5. The lock(s) should be externally powered. Onboard RS485 power with max 2 A at 12 V DC.

6. Not intended for UL 294

Dimension drawing

