

AXIS A1610 Network Door Controller

Versatile edge-based two door controller

This advanced and robust solution includes everything needed to control two doors – all powered by one PoE cable. It offers fast and easy installation on walls. Plus, it's suitable for plenum spaces. Thanks to intelligence on the edge, it can internally handle all tasks related to door access – even if the network is down. Fully integrated within Axis end-to-end and partner solutions, this scalable product is optimized for both small and large installations. It includes six auxiliary I/Os for easy integration. Plus, it supports flexible authentication using different types of credentials. Furthermore, built-in cybersecurity features prevent unauthorized access and safeguard your system.

- > **Advanced control for two doors**
- > **Versatile installation with plenum rating**
- > **Intelligence on the edge**
- > **Built-in cybersecurity features**
- > **Integrated with Axis and 3rd party solutions**



AXIS A1610 Network Door Controller

Door controller

Readers

Up to 4x OSDP readers, or 2x Wiegand reader
Up to 16x AXIS A4612 Network Bluetooth® Reader
OSDP Secure Channel supported, OSDP Secure Profile verified

Doors

1-2 wired doors or 1 wired door together with a single wireless lock gateway per controller
Support for elevator control for 16 floors with A9910¹
Support for integrating up to 16x ASSA ABLOY Aperio®² using the AH30 Communication Hub

Credentials

Third-party access management software depending on server capacity³. Up to 250 000 credentials stored locally.

Event buffer

Qualified for up to 250 000 events stored locally

Power

Power in: 10.5–28 V DC, max 36 W (max 2.4 A at 10.5 V, max 0.9 A at 28 V), or Power over Ethernet (PoE) IEEE 802.3at, Type 2 Class 4

12 V DC as backup

Power out lock: 2x 12/24 V DC

With PoE+: max 900 mA at 12 V DC, max 410 mA at 24 V DC in total

With DC in: max 1800 mA at 12 V DC, max 750 mA at 24 V DC in total

Power out reader: 2x 12 V DC, max 500 mA in total

Auxiliary DC output: 1x 12 V DC output, max 200 mA

Total power budget for peripheral devices (locks, readers etc.): 2100 mA at 12 V if powered by DC, 1300 mA at 12 V if powered by PoE Class 4

I/O interface

Reader

Power output: 2x 12 V DC, max 500 mA
2x2 configurable supervised inputs/outputs (digital input: 0 to max 30 V DC; digital output: 0 to max 30 V DC, open drain max 100 mA)
Data: OSDP/RS485 half duplex, Wiegand

Door

Power output: 12/24 V DC, jumper configurable
Output relay: 2x relay NO/NC, max 2 A at 30 V DC, resistive
2x2 supervised inputs for door monitors and REX (digital input: 0 to max 30 V DC)

Auxiliary

DC output: 1x 12 V DC output, max 200 mA
4x configurable inputs/outputs (digital input: 0 to max 30 V DC; digital output: 0 to max 30 V DC, open drain max 100 mA)

External

2x configurable inputs/outputs for auxiliary equipment (digital input: 0 to max 30 V DC; digital output: 0 to max 30 V DC, open drain max 100 mA)

Supervised input

Configurable input for reader interface, door REX input, door position sensor input, and AUX
Programmable end-of-line resistors, 1 K, 2.2 K, 4.7 K and 10 K, 1 %, ¼ watt standard

Cable requirements

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

DC power and relay: AWG 18–16

Ethernet and PoE: STP CAT 5e or higher

Reader data (RS485): 1 twisted pair with shield, qualified for up to 1000 m (3281 ft)

Reader data (Wiegand): Qualified for up to 150 m (500 ft)

Reader powered by controller (RS485): AWG 20–16, qualified for up to 200 m (656 ft)⁴

Reader powered by controller (Wiegand): AWG 20–16, qualified for up to 150 m (500 ft)⁵

I/Os as inputs: Qualified for up to 200 m (656 ft)

1. From version 12.6.102.1

2. Requires a license

3. Not intended for UL 294

4. Depending on the reader's voltage and current input range. Evaluated with A4020-E and A4120-E.

5. Depending on the reader's voltage and current input range.

System on chip (SoC)

Memory

512 MB RAM, 2048 MB Flash

Network

Security

Password protection, IP address filtering, HTTPS⁶ encryption, IEEE 802.1x (EAP-TLS)⁶ network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot
Axis Edge Vault with Axis device ID, secure keystore (CC EAL6+ certified hardware protection of cryptographic operations, certificates and keys)

Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS⁶, HTTP/2, TLS⁶, QoS Layer 3 DiffServ, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP[®], SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTCP, RTP, SRTP, TCP, UDP, IGMPv1/v2/v3, DHCPv4/v6, ARP, SSH, NTCIP, SIP, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf)

Events

Tamper detection

Removal of unit cover/tamper front
Reader tamper
Tilting, vibration

General

Casing

Aluminum
Color: white NCS S 1002-B
For repainting instructions of skin cover or casing and impact on warranty, contact your Axis partner.

Sustainability

PVC free

Connectors

RJ45 10BASE-T/100BASE-TX PoE
Terminal blocks: DC power, 14 inputs/outputs, RS485/Wiegand, relay, battery. Detachable and color coded connectors for ease of installation.

Operating conditions

-40 °C to 55 °C (-40 °F to 131 °F)
Conditional maximum temperature⁷: 70 °C (158°F)
UL 294: 0 °C to 55 °C (32 °F to 131 °F)
Humidity 20–85% RH (non-condensing)

Storage conditions

-40 °C to 55 °C (-40 °F to 131 °F)

Approvals

EMC

EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, 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, KS C 9832 Class A, KS C 9835

Safety

IEC/EN/UL 62368-1 ed. 3,
CAN/CSA C22.2 No. 62368-1 ed. 3, UL 294

Environment

EN 50581

Dimensions

175 x 175 x 60 mm (6.9 x 6.9 x 2.4 in)

Weight

1.2 kg (2.6 lb)

Mounting

Wall mount

DIN rail mount

Included accessories

Installation guide, mating connectors (mounted), grounding kit, cable ties

6. 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).

7. Only DC IN as a power source. The lock(s) should be externally powered. Onboard reader power with max 500 mA at 12 V DC.

Optional accessories

AXIS A9910 I/O Relay Expansion Module

AXIS TA4711 Access Card

AXIS TA4712 Key Fob

AXIS TA1802 Top Cover⁸

AXIS TA1901 DIN Rail clip⁸

AXIS TA1902 Access Control Connector Kit⁸

AXIS T98A15-VE Surveillance Cabinet⁸

AXIS 30 W Midspan⁸

AXIS 30 W Midspan AC/DC⁸

AXIS T8006 PS12⁸

For more accessories, see www.axis.com

Languages

English, German, French, Spanish, Italian, Russian,
Simplified Chinese, Japanese, Korean, Portuguese,
Polish, Traditional Chinese

Warranty

5-year warranty, see axis.com/warranty

8. Not intended for UL 294