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

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Door controller

Readers
Up to 4x OSDP readers, or 2x Wiegand 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 integrating up to 16x ASSA ABLOY Aperio® wireless lock technology

Credentials
Third-party access management software depending on server capacity[1]. 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

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)[2]
Reader powered by controller (Wiegand): AWG 20-16, qualified for up to 150 m (500 ft)[3]
I/Os as inputs: Qualified for up to 200 m (656 ft)

1. *Not intended for UL 294*
2. *Depending on the reader's voltage and current input range. Evaluated with A4020-E and A4120-E.*
3. *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, HTTPS[4] encryption, IEEE 802.1x (EAP-TLS)[4] 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, HTTPS[4], HTTP/2, TLS[4], 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 temperature[5]: 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

4. *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).*
5. *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 TA4711 Access Card
AXIS TA4712 Key Fob
AXIS TA1802 Top Cover[1]
AXIS TA1901 DIN Rail clip[1]
AXIS TA1902 Access Control Connector Kit[1]
AXIS T98A15-VE Surveillance Cabinet[1]
AXIS 30 W Midspan[1]
AXIS 30 W Midspan AC/DC[1]
AXIS T8006 PS12[1]
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*