



# AXIS A1610-B Network Door Controller

## 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<sup>1</sup>. 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 %, 1/4 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)<sup>2</sup>

**Reader powered by controller (Wiegand):** AWG 20–16, qualified for up to 150 m (500 ft)<sup>3</sup>

**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<sup>4</sup> encryption, IEEE 802.1x (EAP-TLS)<sup>4</sup> 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<sup>4</sup>, HTTP/2, TLS<sup>4</sup>, QoS Layer 3 DiffServ, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP<sup>®</sup>, 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<sup>5</sup>: 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 50 mm (6.9 x 6.9 x 2.0 in)

### Weight

800 g (1.8 lb)

### Mounting

Cabinet mount<sup>6</sup>

DIN rail mount<sup>6</sup>

Stack mount<sup>6</sup>

### 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.

6. Shall be mounted in UL listed UL 294 enclosure with tamper switch.

### **Optional accessories**

AXIS TA4711 Access Card

AXIS TA4712 Key Fob

AXIS TA1802 Top Cover<sup>1</sup>

AXIS TA1901 DIN Rail clip<sup>1</sup>

AXIS TA1902 Access Control Connector Kit<sup>1</sup>

AXIS T98A15-VE Surveillance Cabinet<sup>1</sup>

AXIS 30 W Midspan<sup>1</sup>

AXIS 30 W Midspan AC/DC<sup>1</sup>

AXIS T8006 PS12<sup>1</sup>

For more accessories, see [www.axis.com](http://www.axis.com)

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### **Languages**

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

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### **Warranty**

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