

# AXIS A1601

## Advanced access management in midsized and large systems

With door controllers from Axis, you install one smart, independent device by each door to create a scalable access control system. The open platform allows you to mix and match best-of-breed software and hardware, and enables easy integration with other systems such as video surveillance, intrusion detection, and time and attendance. AXIS A1601 Network Door Controller is ideal for advanced access management in mid-sized and large, multi-site installations using third-party software. It has a powerful processor, expanded storage and memory, relays, and I/O ports. AXIS A1601 is powered by PoE+ and can also power connected equipment.

- > [Support for advanced functionality](#)
- > [Based on Axis open platforms](#)
- > [ONVIF Profile A and C compliant](#)
- > [Supports most reader types](#)
- > [Ease of installation and PoE+ support](#)



# AXIS A1601

Door controller		General	
<b>Readers</b>	Up to 2 readers, RS485 (OSDP)/Wiegand, with supported card formats. Integration with ASSA ABLOY Aperiø and Simons Voss SmartIntego wireless lock technologies.	<b>Casing</b>	Aluminum Color: white NCS S 1002-B For repainting instructions of skin cover or casing and impact on warranty, contact your Axis partner.
<b>Doors</b>	1–2 doors <sup>a</sup>	<b>Sustainability</b>	PVC free
<b>Credentials</b>	Unlimited with third-party access management software depending on server capacity. Up to 70 000 credentials stored locally in a fallback scenario where connection to partner software is temporarily lost.	<b>Memory</b>	512 MB RAM, 1 GB Flash
<b>Event history</b>	70 000 first in, first out (FIFO)	<b>Power</b>	<b>Power in:</b> 10–28 V DC, max 36 W, or Power over Ethernet (PoE) IEEE 802.3at Type 2 Class 4. 12 V battery as backup. <b>Relay:</b> 2x relay NO/NC, max 2 A DC <b>Power out lock:</b> 2x 12/24 V DC, max 24 W <b>Total power budget for peripheral devices (locks, readers etc.):</b> 2200 mA at 12 V if powered by DC, 1400 mA at 12 V if powered by PoE Class 4
<b>Access schedules</b>	Unlimited or third-party software dependent	<b>Connectors</b>	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. Wire size for connectors: CSA: AWG 28–16, CUL/UL: AWG 30–14
I/O interface		<b>Operating conditions</b>	-40 °C to 55 °C (-40 °F to 131 °F) Humidity 20–85% RH (non-condensing)
<b>I/O functionality</b>	<b>Reader I/O</b> DC output: 2x 12 V DC output, max 545 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) <b>Reader data</b> OSDP/RS485 half duplex, Wiegand <b>Auxiliary</b> DC output: 1x 12 V DC output, max 50 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) <b>Door connections</b> 2x2 supervised inputs for door monitors and REX (digital input: 0 to max 30 V DC) <b>External</b> 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)	<b>Storage conditions</b>	-40 °C to 55 °C (-40 °F to 131 °F)
Network		<b>Approvals</b>	<b>EMC</b> EN 55032 Class A, EN 50130–4, EN 61000–3–2, EN 61000–3–3, EN 55024, EN 61000–6–1, EN 61000–6–2, FCC Part 15 Subpart B Class A, ICES–003 Class A, VCCI Class A, RCM AS/NZS CISPR 32 Class A, KC KN32 Class A, KC KN35 <b>Safety</b> IEC/EN/UL 62368–1, UL 2043 <b>Environment</b> EN 50581
<b>Security</b>	Password protection, IP address filtering, HTTPS <sup>b</sup> encryption, IEEE 802.1X <sup>b</sup> network access control, digest authentication, user access log, centralized certificate management	<b>Dimensions</b>	175 x 175 x 60 mm (6 7/8 x 6 7/8 x 2 3/8 in)
<b>Supported protocols</b>	IPv4, IPv6, HTTP, HTTPS <sup>b</sup> , SSL/TLS <sup>b</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>®</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH	<b>Weight</b>	1.2 kg (2.6 lb)
System integration		<b>Included accessories</b>	Installation guide, mating connectors (mounted), grounding kit, cable ties
<b>Application Programming Interface</b>	Open API for software integration, including VAPIX <sup>®</sup> ; specifications at <a href="http://www.axis.com">www.axis.com</a> ONVIF <sup>®</sup> Profile C and ONVIF <sup>®</sup> Profile A, specification at <a href="http://onvif.org">onvif.org</a>	<b>Optional accessories</b>	AXIS Access Card 1K AXIS T8134 60 W Midspan AXIS T8128 PoE Splitter 24 V (requires 30 W midspan) AXIS T8129 PoE Extender AXIS T98A15–VE Surveillance Cabinet <sup>c</sup> For more accessories, see <a href="http://www.axis.com">www.axis.com</a>
<b>Integration-ready</b>	AXIS A91 Network I/O Relay Module Series AXIS A4010–E Reader AXIS A4011–E Reader ASSA Aperiø RS485 Communication Hub SimonsVoss SmartIntego TCP/IP GatewayNode	<b>Languages</b>	English, German, French, Spanish, Italian, Polish, Dutch
Events		<b>Warranty</b>	Axis 3-year warranty and AXIS Extended Warranty option, see <a href="http://www.axis.com/warranty">www.axis.com/warranty</a>
<b>Tamper detection</b>	Removal of unit cover/tamper front Reader tamper Tilting, vibration	<p>a. <i>Power consumption dependent; max load for locks, readers and other equipment is 24 W with PoE+ and 30 W with 10–28 V DC.</i></p> <p>b. <i>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).</i></p> <p>c. <i>In outdoor installations combining AXIS A1601 and AXIS T98A15–VE, the maximum allowed voltage is 30 V DC.</i></p>	
<b>Event log</b>	Configurable by time and topic	<b>Environmental responsibility:</b>	
<b>Event triggers</b>	Tamper detection, power loss, network loss, configuration, door, event logger, hardware, input signal, schedule, system, time, virtual inputs through API	<a href="http://www.axis.com/environmental-responsibility">www.axis.com/environmental-responsibility</a>	
<b>Event actions</b>	Notification: email, HTTP, HTTPS, TCP and SNMP trap External output activation, status LED		