Aperio®
Communication Hub

Technical information

ASSA ABLOY
Opening Solutions

Experience a safer
and more open world

Communication happens in real time
Control up to 64 doors with Aperio communication hubs for indoor use. Easy and cost-effective to install, the hub is the nexus between Aperio devices and the EAC system.

Communication between hubs and Aperio devices happens in real time. Encrypted radio communication.

Integrated antenna with the option to mount an external antenna.



The hubs are easy and cost-effective to install.

Built-in tamper switch. Detection of removal from bracket.

For standard electrical installation boxes with 60mm fixing screw distance. They fit in standard flush-mounted boxes.

The range of transmission to Aperio devices is up to 25 m.

Event Log in the hub.

The user receives a quick overview of the status of the hub and locks connected via an LED signal pattern (communication, activation, status, etc).

Firmware upgrade possibilities.

AH40 Gen5 Communication Hub

- For connection to EAC system
- TCP/IP communication encrypted using TLS 1.1/1.2
- Control up to 64 locks
- PoE (Power over Ethernet) or external power supply

AH30 Gen5 Communication Hub

- Connection to the EAC system via RS485 bus (addressable)
- Control up to 16 locks

AH20 Standard Wiegand Gen5 Communication Hub

- 1-to-1 communication
- For connection to EAC system via Wiegand interface
- Compatible with most access control systems – no protocol integration needed

AH20 Advanced Wiegand Gen5 Communication Hub

- 1-to-1 communication
- For connection to EAC system via Wiegand interface
- Compatible with most access control systems – no protocol integration needed
- Four specific function relay outputs: These relay outputs can be connected to the controller.

Output date: 28.10.2024

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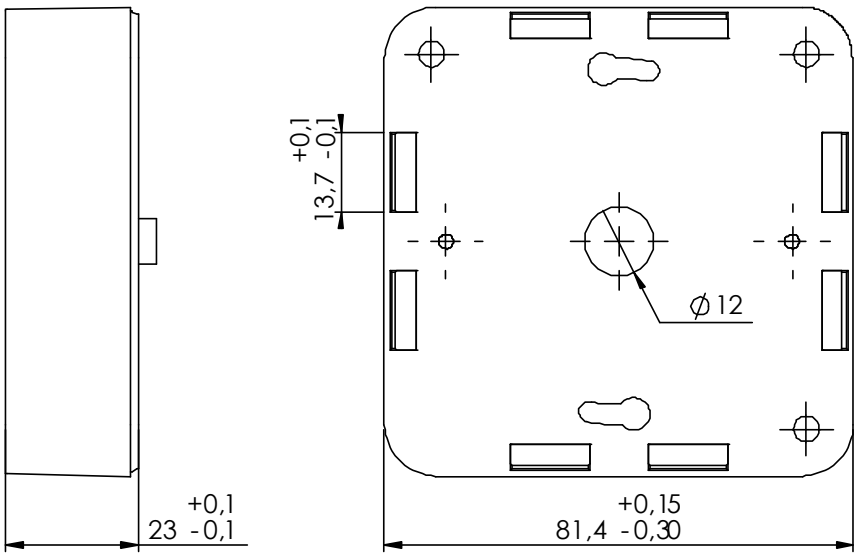
Documents and certificates

Technical data and features	Model name			
	AH40 Gen5	**AH30 Gen5**	**AH20 Standard Gen5**	**AH20 Advanced Gen5**
Approvals	CE, ETL, FCC, IC, C-Tick, CB, UK CA	CE, ETL, FCC, IC, C-Tick, UK CA	CE, ETL, FCC, IC, C-Tick, UK CA	CE, ETL, FCC, IC, C-Tick, UK CA
Safety and emissions	IEC 62368-1:2014, EN 62368-1:2014 + A11:2017, UL/CSA 62368-1:2014, EN 301 489-1 V2.1.1, EN 301 489-17 V3.2.0, EN 300 328 V2.2.2, EN 50130-4:2011 + A1:2014, EN 62311, FCC 47CFR Part 15 subpart B and subpart C, ISED RSS-247 and ICES-003, AS/NZS 4268			
Connections	IP connection	RS485	Wiegand	Wiegand
Doors integratable	64	16	1	1
Dimensions	82 × 82 × 37 mm (H × W × D)			
Required power supply	8-24 VDC or Power over Ethernet (PoE) PoE: IEEE 802.3af compliant class 1 Powered device (PD) External Power supply: The power supply is able to deliver minimum 1.2W. The power supply shall be 3 A over current protected.	8 – 24V, DC 0.8W	8 – 24V, DC 0.8W	8 – 24V, DC 2W
Relay ratings	n/a	n/a	n/a	4 × 30VDC/15W resistive load. The messages are fixed as follows: DPS (Door Position), RX (Request to exit), Battery Alarm Output, Tamper Alarm/ Lock Jammed Output.
Radio standard	IEEE 802.15.4 (2400 – 2483,5MHz), 16 channels (11-26)	IEEE 802.15.4 (2400 – 2483,5MHz), 16 channels (11-26)	IEEE 802.15.4 (2400 – 2483,5MHz), 16 channels (11-26)	IEEE 802.15.4 (2400 – 2483,5MHz), 16 channels (11-26)
Encryption (radio communication)	AES 128 bits			
Receiver sensitivity	-100 dBm			
Wireless operating range	Range of up to 25m			
Internal antenna	2 cross polarized dipoles			
External antenna	One reverse polarity SMA external antenna connector. AH40 is certified for use with ASSA ABLOY external antenna AH-ANTENNA-1. If other external antenna is used it must be of same type (dipole) and not have larger antenna gain than 3.6 dBi.			
Class of protection	IP 20			
Tamper detection	Yes. Tamper switch detects removal from wall bracket. Signal to the system via communication protocol.	Yes. Tamper switch detects removal from wall bracket. Signal to the system via communication protocol.	Yes. Not functional – for future use.	Yes. Tamper switch detects removal from wall bracket. Signal to the system via wired relay output.
Operating temperature range	5°C to 35°C			
Relative humidity	Less than 95% (non-condensing)			
Status	LED (red/green/orange)			

It includes:

- 1 hub with installation instructions
- Fixing screws to mount hub to wall housing
- Wall mount bracket

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