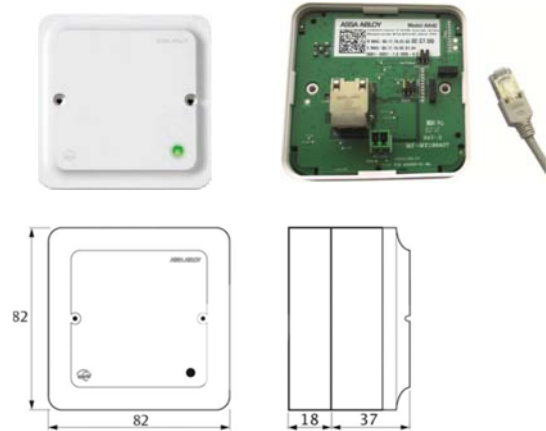


Aperio IP Hub integration

Aperio IP Hub integration

The Esmi Access - Aperio IP Hub integration offers an interface to Aperio AH40 IP Hubs. Each Hub can take up to 15 doors to be controlled wirelessly through one Aperio Hub channel. The Aperio locks send card user information to the IP hubs which communicate with Esmi Access via TCP/IP. Esmi Access makes the decision to allow or deny access and sends the answer to the IP hub. Esmi Access Wireless Solution offers a cost effective way to integrate wireless locks. There is no need for special cabling because all hubs are powered and connected via IP/Ethernet to a POE switch using standard network cabling.



Aperio IP Hub Integration Features

Esmi Access - Aperio IP Hub integration allows powerful access control features of Esmi Access to be combined with Aperio Wireless locks. Access granted or denied decision is made by Esmi Access. There can be up to 100 Aperio channels connected Esmi Access server depending network and server resources.

Door positions, lock state and battery status can be monitored to provide real time access control alarms and events. Aperio Access control events and alarms can trigger functions in Esmi Access.

Aperio Wireless Locks Features

- Main electronics (RFID + radio), outside security-relevant electronics inside
- Outside handle rotates freely, inside handle always engaged
- Possibility to store up to 10 emergency cards
- LED for status visualization

EsmiAccess - Aperio IP Hub Integration Features

- Allows to connect up to 15 Aperio® devices on a single hub
- Integrated antenna with the option to mount an external antenna
- Encrypted radio communication
- TCP/IP communication encrypted using TLS 1.1/1.2
- Powered using Power over Ethernet (PoE) or external power supply
- LED for status visualization

Technical data Aperio® AH40 IP hub

- Approvals: CB, CE, C-Tick, ETL, FCC, IC, ICASA
- Safety and Emissions: EN ETSI 301 489-17 v2.2.1, EN ETSI 300 328 v1.8.1, EN 60950-1 2006 / A11:2009 / A12:2011/ A1:2010 / AC:2011,
- Dimensions: 82 mm x 82 mm x 37 mm
- Power supply PoE: IEEE 802.3af compliant class 1 Powered device (PD),
- External Power supply: deliver minimum 3.5 W and shall be 3 A over current protected.
- Radio standard: IEEE 802.15.4 (2400 –2483,5MHz), 16 channels (11-26)
- Encryption(radio): AES 128 bits
- Wireless op. range: Typical range of 15-25 m
- Receiver sensitivity: -100 dBm
- Wireless tr. power: 10 dBm/MHz according to EN ETSI 300 328.
- Internal antenna: 2 port cross polarized patch ant.
- Antenna external: One reverse polarity SMA external antenna connector.
- Class of protection: IP 20
- Op. temp. range: 5°C to 35°C
- Humidity: < 95% (non-condensing)
- Status: LED (red/green/orange)

Order code

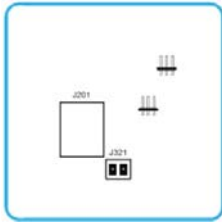
- FFS08805010 Aperio AH40 IP HUB for Esmi Access
- FFS08805020 Esmi license for Aperio AH40 IP channels
- Note! Requires Esmikko v 17.1 or newer

Supported credential formats:

Credentials used at Aperio v3 doors must have the same formats that Esmi Access door controllers use.

- Note! Indala prox technology is not supported in Aperio locks.
- HID 26 bit, Esmi 27 bit, Esmi Secure 29 bit
- Mifare/ Desfire 32 -bit CSN (MSB).
- All other bit count formats are not supported.

Installation



Ethernet connector J201

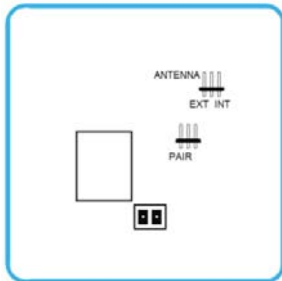
Connection to the Esami Access server through a 10BASE-T / 100BASE-TX Local Area Network. Can also be used for power supply if connected to a IEEE 802.3af compliant Power Sourcing Device (PSE). Wire requirements CAT5 or higher.

Connector J321

Power supply input, 8-24 V DC. The power supply shall be a Limited Power Source (LPS) according to EN 60950-1. The power supply shall be 3A over current protected. Wire requirements 16-22 AWG.

Note:

When PoE (Power over Ethernet) is used, no power supply may be connected to J321. The installation shall comply with national wiring regulations.



ANTENNA jumpers

- Select external antenna by connecting the two left pins. (Ext and middle pin)
- Select internal antenna by connecting the two right pins. (Int. and middle pin)

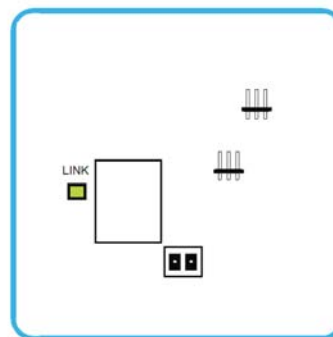
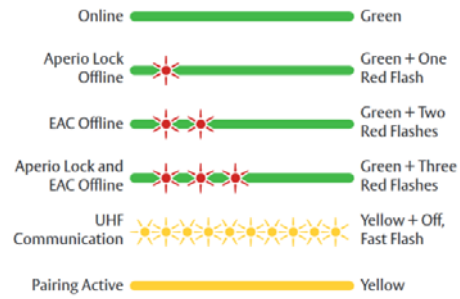
PAIR jumpers

- Select auto-pairing mode by connecting the two left pins. (Pair and middle pin).
- Select manual pairing mode by connecting right and middle pins.

Note: To install an external antenna use a thin screw driver and gently bend the antenna cap loose. Be careful, there are sensitive components behind the cap!

AH40 communication LED indications

Hub has a status LED. It supports the schemes described below.



The "LINK" LED on the communication Hub indicates both status of the Ethernet Link level and if communication is ongoing. Note: LED on the Ethernet connector is not used.