Wireless Lock Integration

COST-EFFECTIVE LOCKING SOLUTIONS WITH THE ASSA ABLOY PEDIGREE

By interfacing a StarGate-5 controller with an Aperio® hub from ASSA ABLOY®, the StarWatch™ SMS platform can easily expand the reach of your access control system, connecting to a wide range of wireless door and cabinet locks. With an open, forward-thinking design, StarWatch supports the framework of existing systems, seamlessly integrating with installed equipment, while providing administrators with the architectural tools needed to add wireless locking devices to new areas and quickly adapt to changing security requirements.

Available in a variety of locking solutions from ASSA ABLOY Group brands, Aperio is a global platform that allows you to affordably increase facility security using local wireless communication. In a StarWatch network, StarGate-5 modules provide real-time on-line/off-line access control management for all locks connected to Aperio hubs. Hubs communicate wirelessly to customizable locks for doors, server racks, and interior cabinets, eliminating the greatest cost and inconvenience of traditional access control - wiring at the door.

Incorporating PoE+ and BACnet® technology, the versatile StarGate-5 panel provides a reliable interface between StarWatch SMS access control systems and Aperio wireless hubs

KEY FEATURES

- StarGate-5 supports 16 electronic locks using up to 8 Aperio hubs

- Each Aperio hub supports 8 locks

- AES 128-bit encryption between the Aperio hub and wireless locks

- Supports HID® 125 kHz proximity or 13.56 MHz iCLASS® credentials

- Large selection of door locks, server rack locks, and cabinet locks

- PoE+ build option for StarGate-5

STARGATE-5 FUNCTIONALITY

Each StarGate-5 controller supports up to 16 electronic locking mechanisms and can be paired with a single Aperio hub or connected to up to 8 hubs. Individual hubs support wireless communication with up to 8 distributed locks. The panel can be installed directly or housed within a metal enclosure with an optional 24VDC power supply. The unit can also provide local battery back-up charged by the local power supply or PoE+ supply.

DAQ APERIO PART NUMBERS

H35-10422: Aperio RS-485 wireless 1:8 hub
- Capable of handling up to 8 locks per hub

H35-10423: Aperio external antenna for wireless hub

APERIO FEATURES

IEEE 802.15.4 wireless communication between lock and Aperio hub connected to StarWatch SMS access control system

Advanced data security with standard encryption techniques

AES 128-bit encryption between Aperio hub and wireless locks

Global wireless platform addressing a wide range of security requirements

ANSI/BHMA Grade 1 hardware offering highest degree of physical security available in access control locks

Large selection of door locks, server rack locks, and cabinet locks

Real-time door status monitoring

Real-time communication with StarWatch SMS for greater security and control

Supports HID 125 kHz proximity or 13.56 MHz iCLASS (full authentication, all formats) credentials

APERIO WIRELESS HUB TECHNICAL DATA

Dimensions	• 3.25 x 3.25 x 1.5" (82 x 82 x 37mm)
Power Supply	• 8-24V DC
Power Draw	• 250 mA max, min 80mA at 12V DC

Wireless Operating Range
- 25m (depending on the building environment)

Wireless Transmit Power
- 10 dBm/MHz

Operating Temperature
- 5°C to 35°C (41°F to 95°F)

Humidity	• <95% non-condensing

ADDITIONAL APERIO FEATURES SUPPORTED

Wireless device tamper in alarm

Wireless device offline/online

Radio disturbance detected/cleared

Battery status low

Wireless device door state/lock state/handle state

STARGATE-5 FEATURES

Micro SDHC card support

USB 2.0 interface

128 bit encryption

FIPS 201 compliant

Two RS232 serial ports

Two RS485 serial ports

Dual gigabit ethernet ports, one with PoE+*

STARGATE-5 TECHNICAL DATA

Processor	• 1000 MHz ARM Cortex A9
Memory	• 512 MB RAM • 512 MB Flash
Operating System	• Linux
Database	• SQL Lite

STARGATE-5 ELECTRICAL

Supply
- PoE+: 25.5W (min) 34.2W (max)*
- DC: 24V +/- 25% 50W (min)

Power Available for External Equipment
- DC: 24W (max) total
- 12.5V +/- 10% @ 2A

Outputs
- 0.2A at 13.8V for charging backup battery, 12.5V on PoE+*

Fuse
- F1 = 3A

STARGATE-5 ENVIRONMENTAL

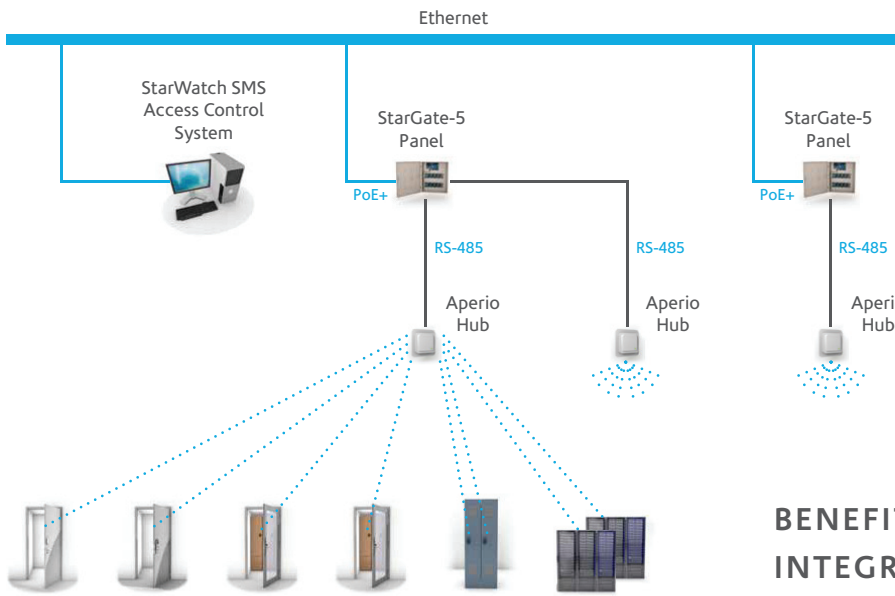|	
Operating	• -40 to +70°C
Storage	• -40 to +70°C
Humidity	• up to 93% non-condensing at 40°C
EMC	• BS EN 55022 • BS EN 50082-1
Dimensions	• 10 in (25.4 cm) x 6 in (15.2 cm)

* requires PoE+ build option

NETWORKED SYSTEM - MULTIPLE HUBS

Ethernet

StarWatch SMS
Access Control
System

StarGate-5
Panel

StarGate-5
Panel

PoE+

PoE+

RS-485

RS-485

RS-485

Aperio
Hub

Aperio
Hub

Aperio
Hub

Each StarGate-5 supports up to 16 locks, which can be distributed across up to 8
Aperio wireless hubs, each supporting up to 8 locks.

STARWATCH™
SMS

BENEFITS OF WIRELESS LOCK INTEGRATION

- No complex site surveys

- Minimal field configuration

- Simplified installation at the opening

- Real-time authentication and alarms

ASSA ABLOY APERIO LOCKS

Aperio-enabled locks are cost-effective at any opening, with standardization across locations worldwide. To view the complete line of Aperio products, visit intelligentopenings.com/Aperio.

PR100
Institutional
Lock

IN100
Commercial
Lock

R100
Surface-Mounted
Reader

A100
Keyless Entry
Lock for Aluminum
and Glass Doors

M100
eCylinder
Lock

KS100
Server Cabinet
Lock

K100
Cabinet
Lock

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