



APERIO
wireless on-line
technology for
access control systems

ASSA ABLOY

The global leader in
door opening solutions

APERIO

wireless technology of the future

APERIO

- Aperio is a new technology that enables mechanical locks to be wirelessly linked to an existing access control system. Aperio is a solution that no one else in the lock industry can offer on a global level today.
- Aperio is a new technology developed to complement new and existing electronic access control systems, providing end users with a simple, intelligent way to upgrade the controllability and security level of their premises.

APERIO

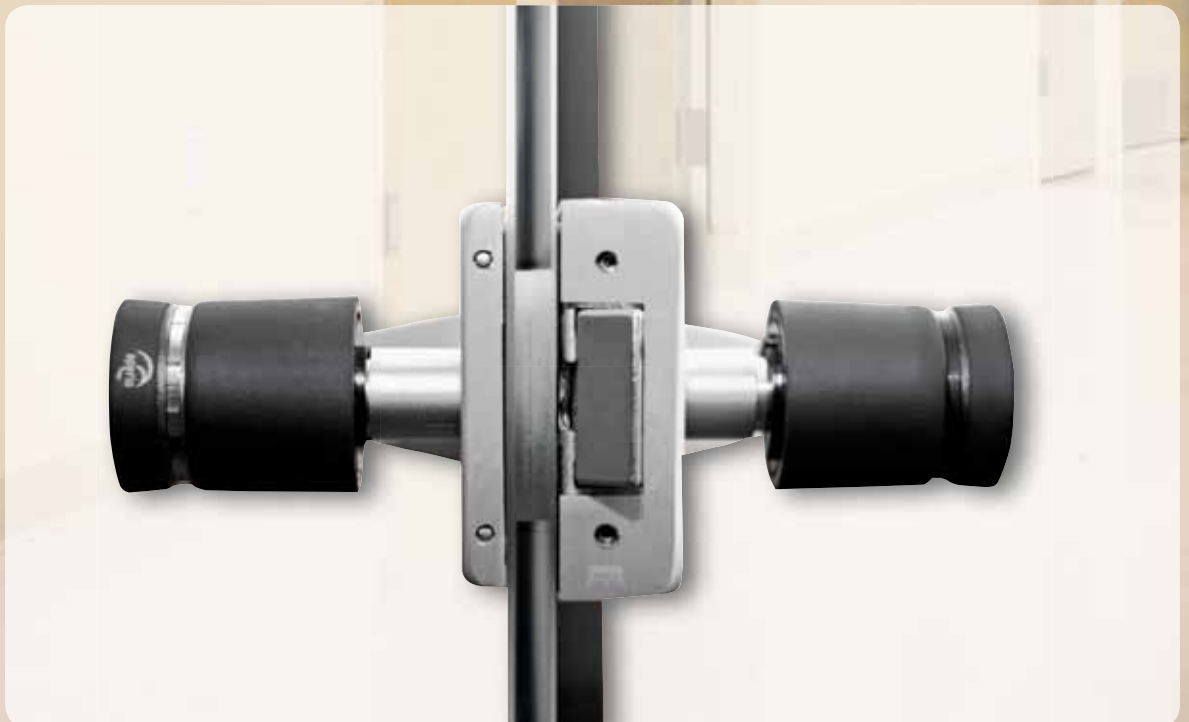
advantages of integration

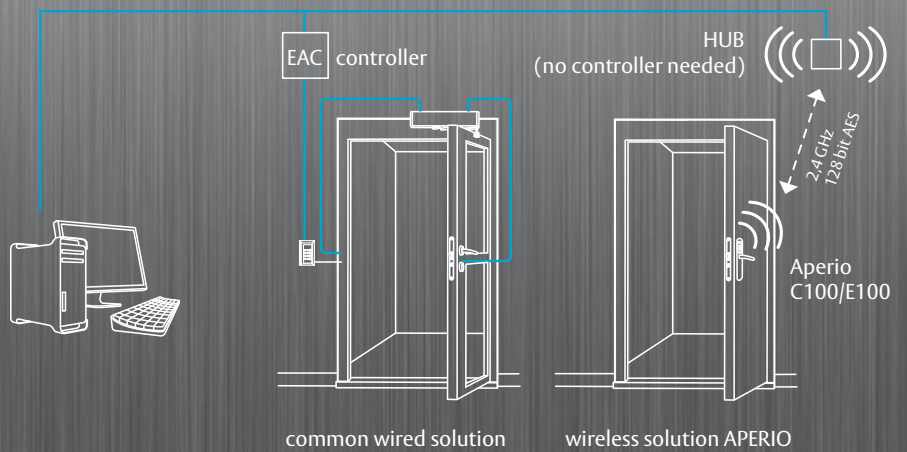
Installation without wiring

Investment saving

Simple integration

- technology is suitable as an extension of existing EAC systems
- wireless on-line communication, i.e. no need to install any wires
- economically profitable solution
- simple and quick installation
- up to 7 times bigger potential for EAC doors comparing to standard wired solution
- easy integration into systems of all EAC producers
- open communication protocol with RS-485
- wiegand interface





Communication HUB

connected via interface
wiegand, RS-485 or TCP/IP
to the EAC system



APERIO C100

RFID reader with cylinder
functionality and on-line
wireless communication
with HUB



APERIO E100

RFID reader with escutcheon
functionality and on-line
wireless communication
with HUB





2,4 GHz
128 bit AES

2,4 GHz
128 bit AES



HUB with 1:1 or 1:8 configuration
(1:1 = 1 HUB for 1 Aperio device,
1:8 = 1 HUB for up to 8 Aperio devices)

APERIO E100 RFID reader with escutcheon functionality and on-line wireless communication with EAC

Dimensions:

312 mm x 41 mm x 10/20 mm

Door leaf thickness:

40 to 100 mm

Safety:

All electronics installed
into internal plate

LED information about status:

red / green / orange

Connection:

- wiegand interface
- RS-485 or TCP/IP interface
with open protocol
communication

Battery:

Lithium CR123A, 3V

Battery lifetime:

min. 40 000 cycles

Wireless communication:

IEEE 802.15.4 (2,4 GHz)

Protection of wireless**communication:**

AES 128 bit

Operating distance**HUB / door escutcheon:**

up to 5 m (1:1)

up to 15 m (1:8)

RFID technology:

Mifare, DesFire, iCLASS
and others

Range of operating**temperature:**

0°C to +60°C

IP protection: 30**Surface treatment:**

stainless steel

Handle shape: L, U shape**Spacing:**

DIN – spacing 72 and 92 mm

Square: 7, 8, 9 mm**Access authorization****in off-line mode:**

10 card holders

Functions of the outside handle:

- Electronically controlled, free at pushing in idle state

Functions of the inside handle:

- Not electronically controlled, always controls lock latch when pushed. In case of a panic lock, it controls also its door latch.

Application:

- For both solid and frame door with narrow frame profile.
- Suitable solution for expansion of existing access control systems or for applications with restriction of installation of classical cable technologies.
- Door fitting can be easily configured for commonly available RFID technologies.

Advantages:

- Creation of access point within existing or new EAC without the necessity of wiring.
- On-line communication.
- Compatible with all DIN mortise locks, for both solid and profiled door.
- Battery operation (no wires).
- Possibility of the accesses management.
- Simple and quick installation.

Certification:

ČSN EN179 – for exits doors
(in package with panic lock).

**COMMUNICATION HUB:**

Provides wireless connection with door escutcheon APERIO E100 installed on the door and interconnection via RS-485 or TCP/IP with the EAC access system.

LED for visualization
of HUB status:

red / green / orange

Dimensions:

82 mm x 82 mm x 13 mm

Power supply:

9V to 30V DC (30 mA @ 12V DC)

APERIO C100 RFID reader with cylinder functionality and on-line communication with EAC

Cylinder dimensions:

Basic dimension 30/30 mm
(other dimensions with 5 mm
step – max. 70/70 mm)

Modular cylinder

Knob dimensions:
42 x 36,4 mm (LxØ)

Modularity:

All electronics installed into
external button with flexible
battery exchange

LED information about status:

red / green / orange

Connection:

– wiegand interface
– RS-485 or TCP/IP interface
with open protocol
communication

Battery:

Lithium CR2, 3V

Battery lifetime:

min. 40 000 cycles

Wireless communication:

IEEE 802.15.4 (2,4 GHz)

Protection of wireless

communication:

AES 128 bit

Operating distance

HUB / cylinder lock:

up to 5 m (1 : 1)

up to 15 m (1 : 8)

RFID technology:

Mifare, DesFire, iCLASS
and others

Range of operating

temperature:

0°C to +60°C

IP protection: 30

Surface treatment:

black, coated with rubber
stainless steel (optional)

Access authorization

in off-line mode:

10 card holders



Functions of the outside button:

- Electronically controlled, freely turning in idle state

Functions of the inside button:

- Not electronically controlled, always controls lock latch
(thumb of cylinder lock) when turned. In combination
with panic lock, it controls also its door latch.

Application:

- For both solid and frame door with narrow frame
profile, glass and other atypical designs.
- Suitable solution for expansion of existing access
control systems or for applications with restriction
of installation of classical cable technologies.
- Cylinder lock can be easily configured for commonly
available RFID technologies.

Advantages:

- Creation of access point within existing or new EAC
without the necessity of cabling.
- On-line communication.
- Compatible with all DIN mortise locks, suitable
for locks on glass door wings and walls.
- Battery operation (no wires).
- Possibility of the accesses management.
- Simple and quick installation.

COMMUNICATION HUB:

Provides wireless connection with door cylinder APERIO C100 installed on the door
and interconnection via RS-485 or TCP/IP with the EAC access system.

**LED for visualization
of HUB status:**

red / green / orange

Dimensions:

82 mm x 82 mm x 13 mm

Power supply:

9V to 30V DC (30 mA @ 12V DC)



