X1R SMART 2.0

Motorised lock
for armoured doors

ISEO®

ULTIMATE ACCESS TECHNOLOGIES

X1R Smart 2.0

ISEO Ultimate Access Technologies presents X1R Smart 2.0: a motorised electronic lock designed for armoured doors, which perfectly integrates the mechanics with the electronics to offer the user security, peace of mind and total freedom of movement. The advanced opening and closing functions are managed by a motor and an electronic board equipped with a cutting-edge microprocessor. In situations of power failure, opening is always guaranteed through the use of the mechanical key, which, thanks to an innovative security system, disconnects the motor during operation with a mechanical cylinder. By installing X1R Smart 2.0, the user can benefit from both peace of mind and an unprecedented level of security.
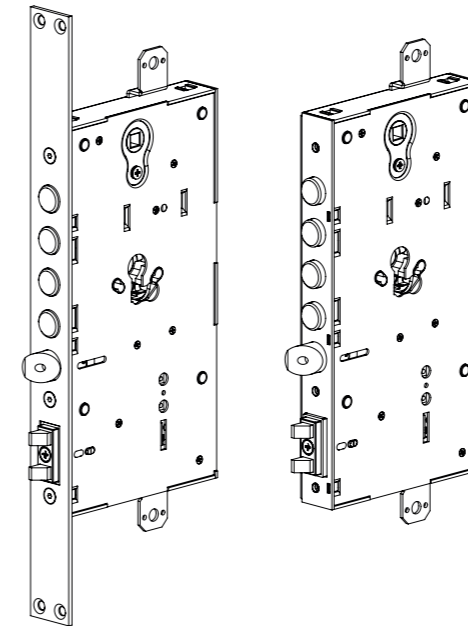
MAIN FEATURES

- Automatic opening and closing
- Single action (anti-panic function)
- Compatible with the most common mechanical locks for armoured doors
- Reversible hand
- Certified for maximum security
- Light or free office mode configuration
- Backlit keypad
- Power supply and energy management
- Opening also with mechanical key
- Can be integrated with domotic systems
- Door status signal
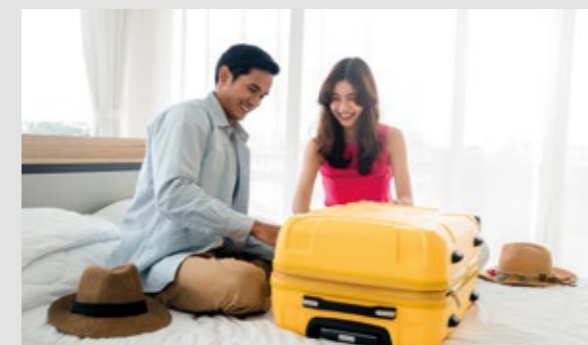- Remote opening command
- Fingerprint reader

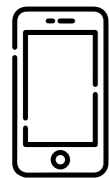**BANK**

LIGHT COMMERCIAL

BED & BREAKFAST

RESIDENTIAL

Open as you like

You can open X1R Smart 2.0 with several electronic credentials, setting functions, time control and time schedules.

However, in case of need, you always have the possibility to open with a mechanical key.

Smartphone

Thanks to the Bluetooth® technology, you can open the door with your smartphone.
The free Argo App enables any Bluetooth® phone (iOS, Android) to unlock the door equipped with X1R Smart 2.0.
The Bluetooth® technology allows remote unlocking of the door up to a distance of 10 meters.
So you can use your phone also as remote control to unlock your door.

Apple watch

Argo App is available also for Apple Watch (from series 3), which you can use to unlock your X1R Smart 2.0 lock.

Fingerprint

X1R Smart 2.0 is integrating fingerprint biometric authentication. The biometric credential is very secure and easy to use: it can't be borrowed, stolen, or forgotten, and forging one is practically impossible.

Pin codes

X1R Smart 2.0 can be equipped with an RFID reader that includes a keyboard. In this way, PIN codes can also be used as credentials to open the door. PIN codes (from 4 to 14 characters) can be easily managed by Argo App like any other credential. It is also possible to activate the Passage Mode function by typing a PIN code. To disable it, just type again the PIN code. Passage Mode function can be Light (by default) or Free, depending on how it has been configured with the Argo App.

RFID credentials

X1R Smart 2.0 has a Multistandard RFID reader that works with 13,56Mhz RFID technology (ISO 14443 A/B). You can open by:
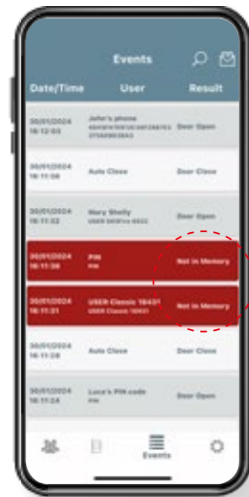
ISEO cards, tags and transponder (13,56Mhz)
ISEO cards are specifically developed with an encrypted UID. This allows a higher level of security in the trasmission between the card and the doorlock.

Mifare cards and tags (MIFARE CLASSIC, PLUS, DESFIRE)
Mifare cards and tags only work by reading the UID (Unique IDentifier).

The highlights of
X1R Smart 2.0

ACCESS
DENIED

Check who's entered

X1R Smart 2.0 stores all entrances and exits made by electronic and mechanical commands. The administrator can view the log of the last 1000 events detected on door and send the report via e-mail. Denied access attempts are highlighted in red.

Free app and free software upgrade

Access control device software updates are free of charge and ensure the best performance for your X1R Smart 2.0. The smartphone signals with a notification when an update is available, and the installation of the new software on the product will be done directly from the smartphone. In this way, each user can continuously take advantage of new system functionality, thus safeguarding the investment made in ISEO electronic products.

Door status function

The doors status function allows to see directly on your smartphone if the door is open or closed and secure.

DOOR STATUS SIGNAL
By using a sensor and relay integrated in the circuit board, the mains-powered X1R Smart 2.0 can provide the "door status" signal (NO/NC output contact - 1A max), which can be used in the home automation system. The relay is also configurable by Argo App as single pulse to activate, for example, a motorized swing door operator.
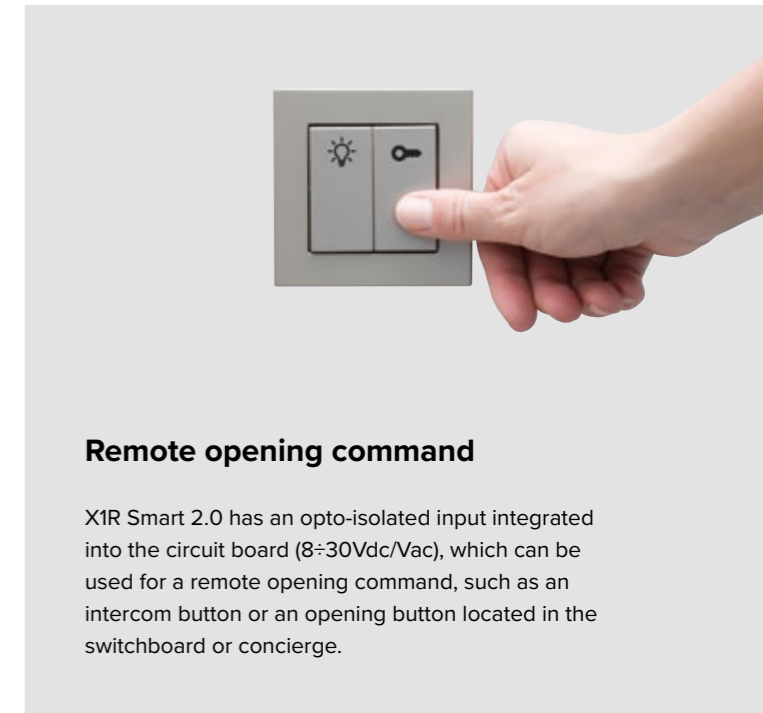
C
common
NC
normally closed
NO
normally open
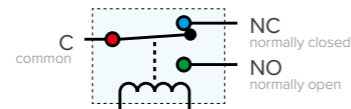
Compatible with all major mechanical locks for armoured doors

X1R Smart 2.0 is interchangeable with the most common mechanical locks for security doors, and the simple electrical connections allow for extremely easy installation. All models are reversible, available with different bolt protrusions and centre distances. When the door is closed and secure, the total projection of the deadbolts is 30 mm, and the latchbolt has a diameter of 20 mm.
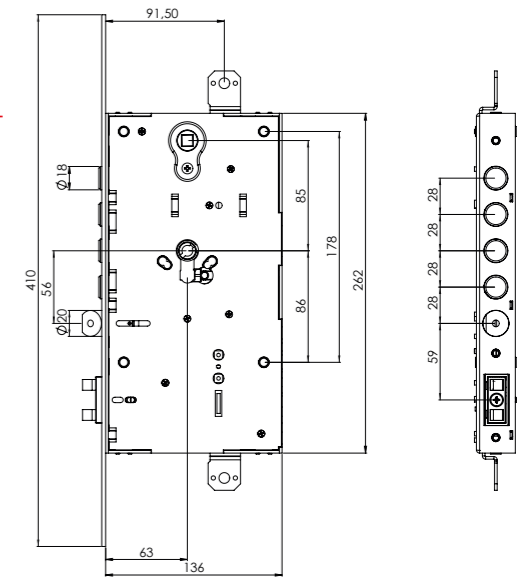
Certified for maximum security

X1R Smart 2.0 is certified according to EN 14846:2008 regulation with 3X9E0P713 classification. In the Single Action version it is also certified EN 179:2008, with 377B1452AB classification lever handle-operated emergency exit device. It is also suitable for use on fire resistant doors, with an EI90 classification (fire resistance of 90 minutes).

Single action
(anti-panic function)

X1R Smart 2.0 is also available in the Single Action version: the inside handle retracts the latch and deadbolts in a single, fluid movement. In this way, the user can always open the door quickly and easily from the inside, simply by lowering the handle, even with the deadbolts extended (door in maximum security condition). This function is also called anti-panic, because it is suitable for installations in combination with emergency exit devices.

Remote opening command

X1R Smart 2.0 has an opto-isolated input integrated into the circuit board (8÷30Vdc/Vac), which can be used for a remote opening command, such as an intercom button or an opening button located in the switchboard or concierge.

Light or Free Passage Mode

With X1R Smart 2.0 and via the Argo App, it is possible to configure the Passage Mode (office mode), Light or Free, without any extra battery consumption.

Light mode
The lock is only closed with the latch.
This function allows greater energy savings, less mechanical wear and tear, and more comfortable operation in terms of speed and quietness.
X1R Smart 2.0 is preset to Light mode from the factory.

Free mode
The lock holds the latch and bolts back to ensure free passage.

The Light and Free functions can be either activated with the Argo App by smartphone, PIN, cards, remote opening button, or scheduled on specific days and times.
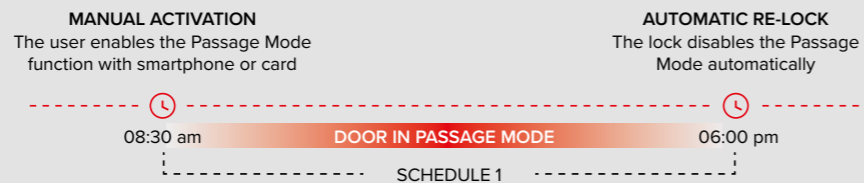
SCHEDULED PASSAGE MODE

X1R Smart 2.0 allows to set two different time schedules, in order to enable and disable the Passage Mode automatically. For each of the two programs, three different settings are available:

1. Passage Mode with automatic re-lock

MANUAL ACTIVATION
The user enables the Passage Mode function with smartphone or card

AUTOMATIC RE-LOCK
The lock disables the Passage Mode automatically

08:30 am — DOOR IN PASSAGE MODE — 06:00 pm
SCHEDULE 1

2. Passage Mode with automatic activation and automatic re-lock

AUTOMATIC ACTIVATION

AUTOMATIC RE-LOCK

08:30 am — DOOR IN PASSAGE MODE — 06:00 pm
SCHEDULE 1
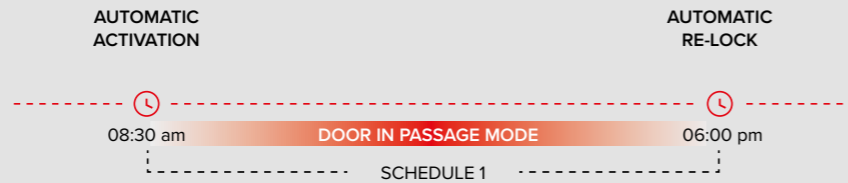
3. Passage Mode with automatic activation and automatic re-lock with first person in

AUTOMATIC ACTIVATION

FIRST PERSON IN
The user enters with an authorized credential

AUTOMATIC RE-LOCK

08:00 am — 08:17 am — DOOR IN PASSAGE MODE — 06:00 pm
SCHEDULE 1

In this time span the door is still closed by bolts. The Passage Mode is activated when the first user enters with an autorized credential.

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Multi-Reader

The Multi-Reader for X1R Smart 2.0 allows you to manage multiple opening credentials with only one device.
It is possible to open the door with a smartphone, RFID credentials, PIN codes and fingerprint.
With a modern and functional design, the Multi-Reader increases the performance of X1R Smart 2.0, improving its ease of use for the user.

Multi-Reader is available in two versions: with keyboard and fingerprint reader or only keyboard.

Multi-Reader with fingerprint
- Smartphone
- RFID cards and tags*
- PIN codes
- Fingerprint**

Multi-Reader
- Smartphone
- RFID cards and tags*
- PIN codes

*(min. 20mm diameter) **For Fingerprint Reader technical specifications refer to the Fingerprint Reader brochure available at iseo.com.

"Wake on hand" technology

The user can switch the reader on and enter a PIN code with a simple hand gesture.
This technology allows to optimize the energy saving and for this reason the Multi-Reader becomes an innovative and unique product of its kind.

1. MULTI-READER OFF
Allows to optimize the energy saving.

2. MULTI-READER ON
A simple hand gesture switches on the device.

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TECHNICAL FEATURES

BATTERY POWER SUPPLY MANAGEMENT

The Multi-Reader turns on automatically with a hand gesture or if it detects an opening credential. The innovative energy management function allows the Multi-Reader to operate even with X1R Smart 2.0 powered only by a standard battery, without any impact on the energy consumption of the lock. The device turns itself off automatically.

RAIN-RESISTANT

The Multi-Reader is suitable for outdoor installations as it is resistant to the most extreme climatic conditions, such as heavy rain or thunderstorms.

LARGE BACKLIT KEYBOARD

The device is equipped with a 12 keys large capacitive keyboard. The keyboard is backlit and switches on automatically or with the "Wake on hand" technology, enhancing the user experience.

MULTICOLOR SIGNALLING LED

A stylish, minimal and well visible multicolour LED, together with a buzzer, notifies the user of ongoing operations.

BLUETOOTH® LOW ENERGY 5.1

Thanks to the Bluetooth® technology, the Multi-Reader communicates through Argo App with any Bluetooth® phone (iOS and Android) and Apple Watch (from series 3).

RFID TECHNOLOGY

The RFID 13,56Mhz antenna, which is embedded in the reader, allows the use of Mifare Classic, Mifare DESFire (ISO 14443/A) cards and keyfob*.
*(min. 20mm diameter).

FINGERPRINT READER VERSION

The Multi-Reader version with integrated fingerprint reader** inherits all the well-known features of biometric authentication with X1R Smart 2.0.
**For Fingerprint Reader technical specifications refer to the Fingerprint Reader brochure available at iseo.com.

PIN CODES

Thanks to the capacitive keyboard and innovative "Wake on hand" technology, it is very easy to use PIN codes (4 to 14 characters) as credentials to open the door.

PERFECTLY INTEGRATED WITH X1R SMART 2.0 AND ARGO APP

The Multi-Reader is directly connected to the electronic board of the X1R Smart 2.0 lock and is fully manageable via the Argo app.

ENCRYPTED COMMUNICATION

The communication between the Multi-Reader and the X1R Smart 2.0 lock is protected by a secure encryption protocol.
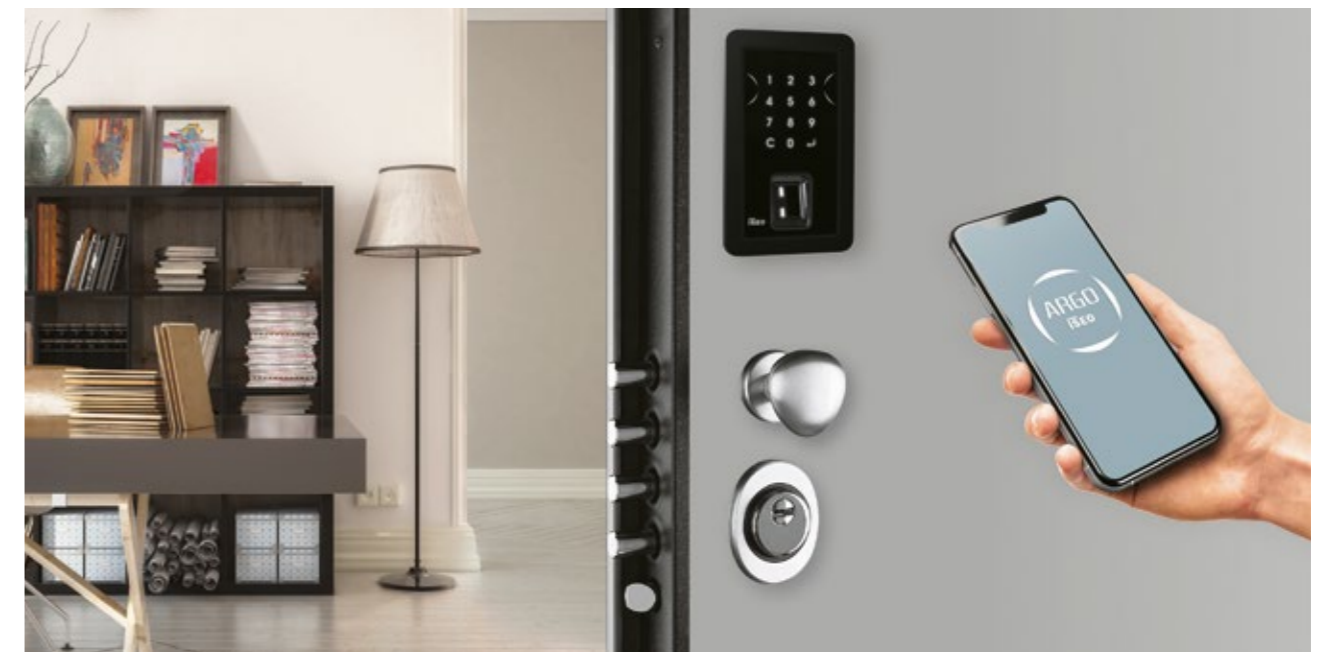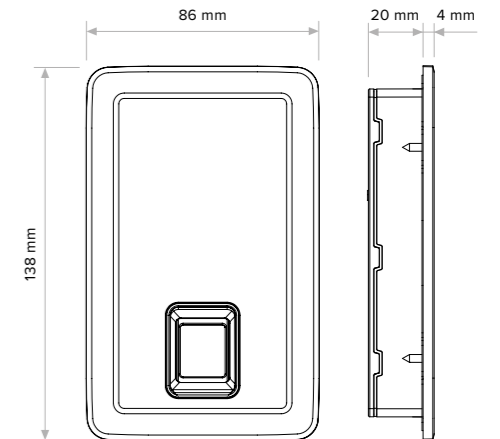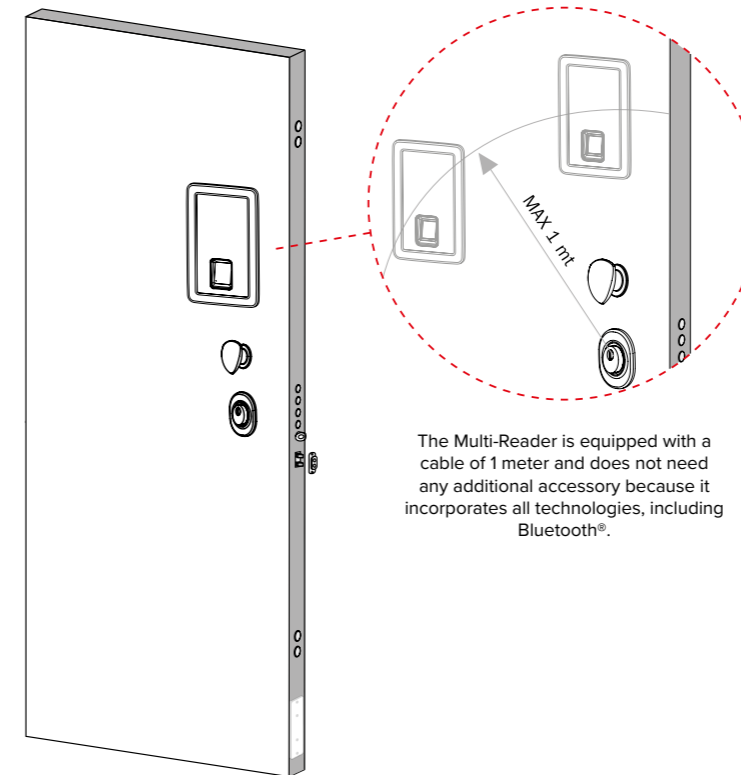
ON-SITE SOFTWARE UPGRADE

The Multi-Reader software can be always upgraded, for example to improve its performances, without dismounting the reader from the door.

DIMENSIONS

The Multi-Reader is mounted on the external panel of the door and has a depth of only 20 mm.

MAX 1 mt

The Multi-Reader is equipped with a cable of 1 meter and does not need any additional accessory because it incorporates all technologies, including Bluetooth®.

86 mm   20 mm   4 mm

138 mm

Hidden RFID Reader

The Hidden External Reader is an RFID reader with a built-in Bluetooth® module (without keypad option), designed to be installed inside the door so that it is invisible from the outside.
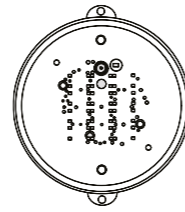
To ensure a good card reading, the reader must be installed inside the door following the guidelines in the Installation Guide supplied with the product. In case of an armoured door with an internal metal panel, the Hidden External Reader must be installed inside a well-defined metal box (optional), to be welded into the metal panel, previously cut to the size of the box, which must be correctly sized to minimise signal interference caused by the metal panel. In this way, the RFID reader works properly with ISEO cards, ensuring a good user experience when reading credentials.
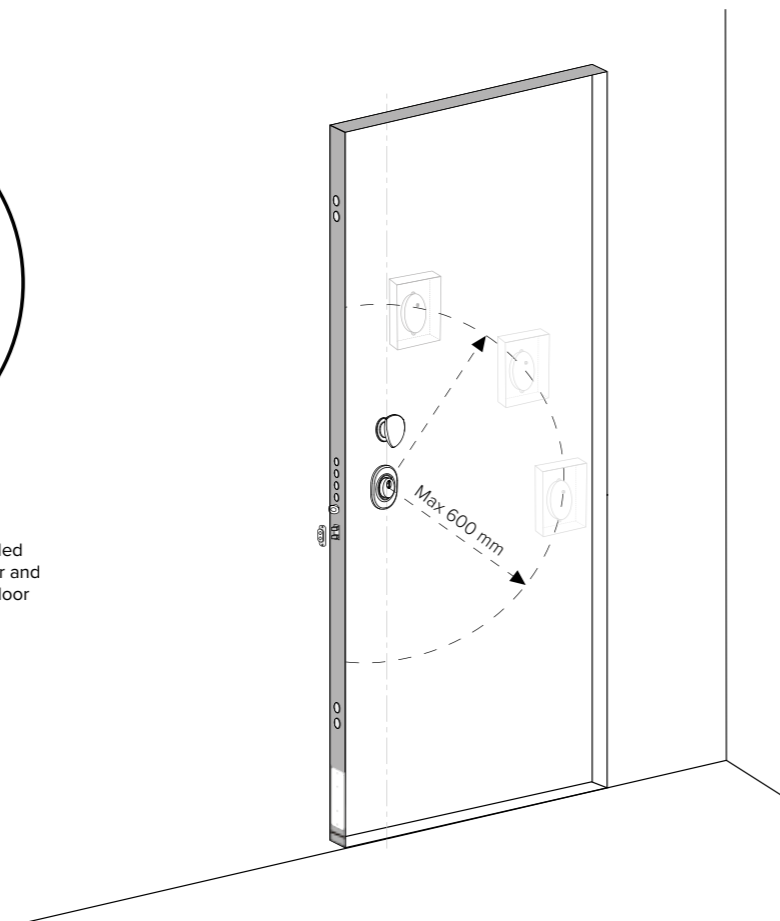
DOOR LATERAL SIDE

Max 20 mm
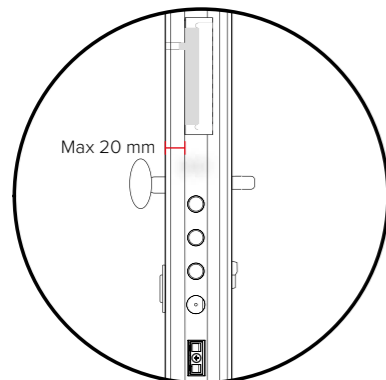
The Hidden External Reader must be installed within 600 mm from the centre of the cylinder and at a maximum distance of 20 mm from the door external panel.

DOOR EXTERNAL SIDE

Max 600 mm

Fingerprint Reader

X1R Smart 2.0 fingerprint reader is available in embedded and surface mounted models. It can be supplied both as ISEO kit (with mounting devices and cover with standard finishes) and as OEM kit (with cable and reader only).

Embedded reader

The X1R Smart 2.0 embedded reader is available in two models allowing different mounting options: flush and protruding
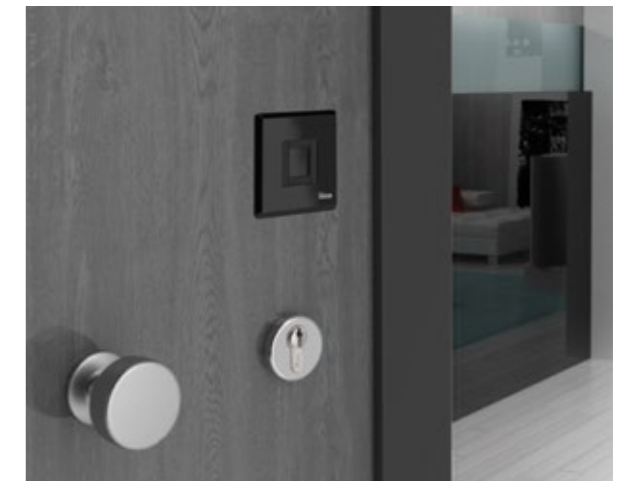
FLUSH
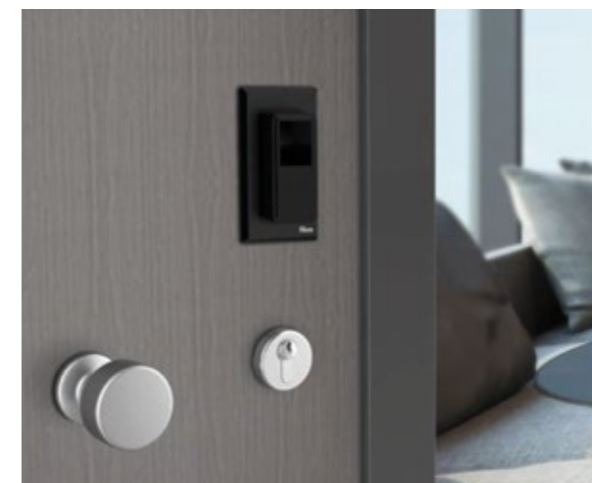
PROTRUDING

Surface mounted reader

The surface mounted reader is applied on the door surface with minimal insertion on the outside door panel without impact on the door structure.

INSTALLATION

X1R Smart 2.0 fingerprint reader is installed on the external side panel of the door at a maximum distance of 1 metre from the X1R Smart 2.0 lock. The reader always requires in addition the External Control Module, that can be one of the following: RFID Reader, Keypad RFID Reader, Hidden RFID Reader.

Power supply and energy management

X1R Smart 2.0 offers three different power supply configurations to meet the needs of different installation types and energy management requirements.

1. ALKALINE BATTERIES POWERED

No wiring needed. The lock uniquely works by using the alkaline battery pack (A).

2. MAINS POWER SUPPLY

Power is supplied by an external feeder connected to the mains (B). The power cable reaches the lock through the cable gland spring (C), usually placed in the hinges side of the door. It is suggested to use alkaline batteries as back-up (A-optional), in order to guarantee the operation of the lock even in case of lack of power supply (black-out).

3. MAINS POWER SUPPLY VIA DOOR CONTACT SENSORS AND ALKALINE BATTERIES

When the door is closed, power is supplied to the lock from the mains (B) via the door contact sensor. When the door is open power is supplied by the alkaline batteries (A), which act also as a back-up in case of power failure.
Thanks to this lock's innovative internal energy management technology, X1R Smart 2.0 switches autonomously and in a very short time from power supply to battery power and vice versa. In this way, the increased energy consumption, following an opening or closing command, which normally occurs at the door sensor contact to the frame (door closed), is always provided by the mains. Consequently, the batteries life is likely to be limited until their expiry date.
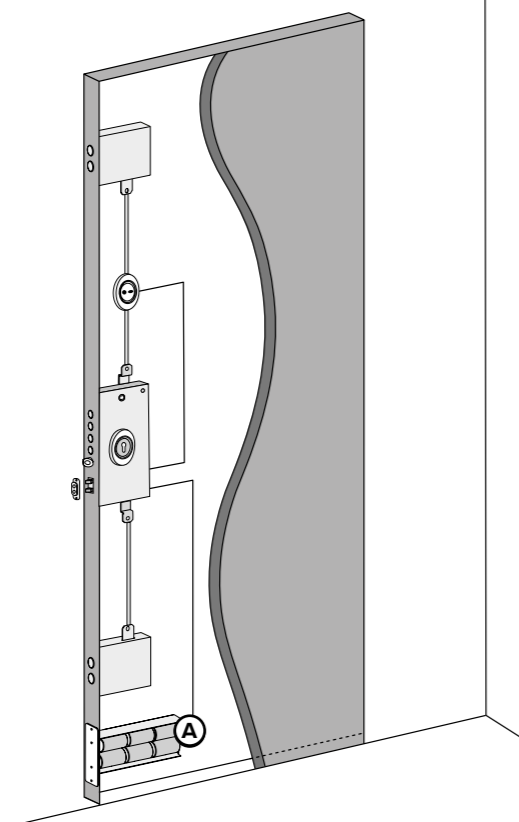
2. MAINS POWER SUPPLY

EXTERNAL SIDE

Multi-Reader

Keypad RFID Reader

RFID Reader

Hidden RFID Reader

OPTIONAL

Fingerprint Reader

INTERNAL SIDE

CREDENTIALS

Transponder

Transponder with key

USER
Cards

Keyfob

Argo Bracelets

Smartphone

Fingerprint

1. ALKALINE BATTERIES POWERED

EXTERNAL SIDE

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Keypad RFID Reader

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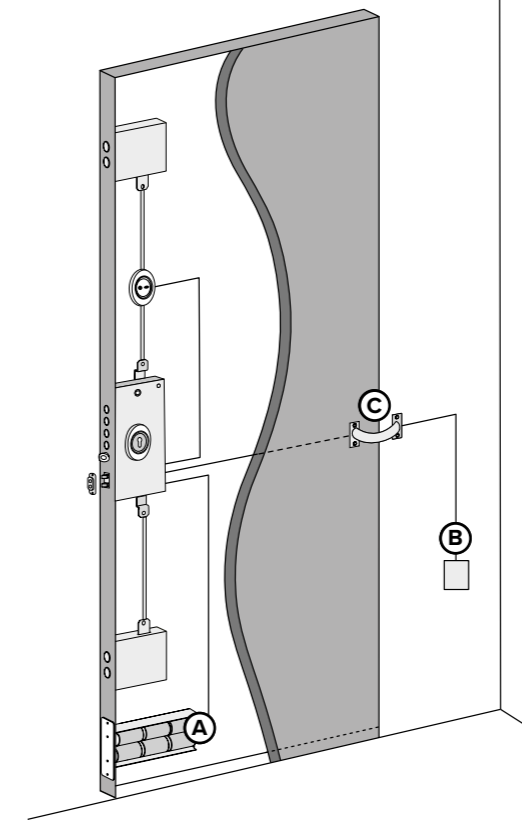
3. MAINS POWER SUPPLY VIA DOOR CONTACT SENSORS AND ALKALINE BATTERIES

EXTERNAL SIDE
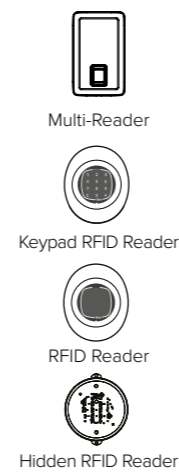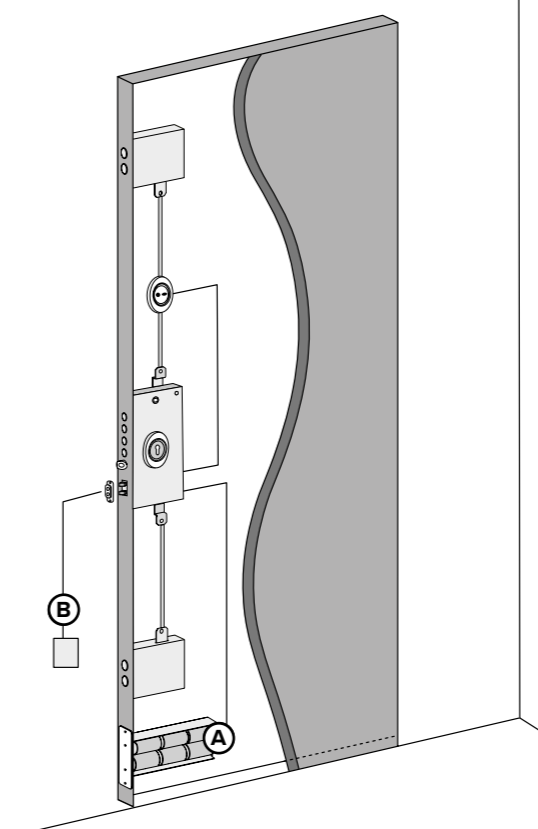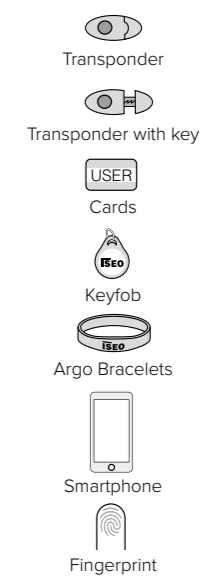
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RFID Reader

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Smartphone

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