one card
one technology
unlimited possibilities...

Introducing the XS4 RFID system, a new concept in access control that allows you to JUMP up to the next level when your needs change.

SALTO Systems unique new networked escutcheons and cylinders can be used for a huge range of access control applications. It’s the first RFID system that can be upgraded at any time.

You choose the level of security control you need. From a simple self programmable system that needs no computer to manage it, through a highly capable mid-range ROM system up to the high performance data on card technology SALTO Virtual Network (SVN) system that allows you to control all the doors in an entire building or group of buildings from a single PC. And now with the brand new XS4 on-line battery operated wireless lock system you can experience real time access control solutions without the need for wiring.

On-line Wireless system
SALTO battery operated real-time access control system

Commercial large
SALTO data-on-card access control system

Commercial lite
SALTO ROM access control system

Residential and small commercial
SALTO self programmable access control system
How does the system work?

Electronic Escutcheons
XS4 Narrow European
XS4 Wide European
XS4 Narrow Scandinavian
XS4 Wide Scandinavian
XS4 ANSI
XS4 Security
XS4 Glass door lock
XS4 Double reader
Complementary escutcheons
Handles & Finishes

Wireless Real-time access control
XS4 Wireless Escutcheon
Gateway
Repeater

SALTO Advanced Panic Bar Solution

Electronic Cylinder
Electronic Cylinder Euro profile
Electronic Cylinder Swiss profile
Electronic Cylinder UK Oval profile
Electronic Cylinder Finishes

Mortise Locks
European mortise lock
Narrow profile European mortise locks
Cylindrical latches
ANSI Mortise locks

Wall Readers
WRM i-Button
WR i-Button for narrow profile frames
WRM Contactless
WR Contactless for narrow profile frames
WR Accessories

Door Controllers
CU2010
CU5000
CU5010
CU50EN
CU50ENS1V
EB8008
WRADAP
CUADAP

Power Supply Boxes
PB212S
PB212L

i-Lockers
i-Locker i-Button
i-Locker Contactless

Energy Saving Devices ESD
i-Button ESD
Contactless ESD

Access Management tools
Portable Programmer Device PPD
Encoder
Desktop Reader

Software
Pro Access Software
HAMS Software

Carriers
i-Button Carriers
Contactless Carriers

Company Profile
XS4-[Access For]
Residential and small commercial

Unlike conventional locks where if the keys are lost you have the expense and inconvenience of replacing all the affected locks and keys - with the new SALTO XS4 RFID escutcheon or e-cylinder self programmable system you just delete the missing key from the system and issue a new one to the user. It’s that simple.

How does it work?
If you want to add new users or delete existing ones you can do so at any time. All you have to do is present the programming key once to the reader followed by all the user keys that you want to operate or delete from the escutcheons. If a user key is lost it can still be quickly and simply deleted from the escutcheons just by touching the shadow card of the user key to the reader. The user key related to the shadow key used is then deleted, while all other user keys remain valid.

Main features and benefits
- **Needs no computer**, all key maintenance is done through a programming key and user’s shadow keys. This allows up to 1000 system users.
- **Available in a huge range of solutions depending on the door** as electronic escutcheon or electronic cylinder, wall readers, automatic door version etc.
- **Multiplication through the MIFARE carrier enables use of existing MIFARE/DESFIRE cards.**
- **Available passage mode** in all versions, permitting the door to be opened if needed.
- **Emergency opening can be performed** if needed through the EPS100.
- **The system can be upgraded** simply by using a Portable Programming Device (PPD) making it possible to upgrade to a ROM system or a data on card SVN system when your needs change.
If you need a higher level of control over who is entering your building and when, the SALTO XS4 RFID ROM system is the answer. It provides all the benefits of a stand alone access control system in a compact, cost effective package.

It’s easy to use Pro Access ROM software can be customized to suit your needs, so you can add users and doors, user groups and zones and set time periods and opening modes that instruct the door to lock or unlock automatically as needed.

How does it work?

It’s also very simple to use. Any changes you make such as adding new users, deleting users, updating the escutcheon, e-cylinder or wall reader, or collecting the event audit trail are done through its Pro Access ROM software and transmitted to the off-line escutcheons or e-cylinders through the Portable Programming Device PPD. Each time you connect the PPD to an escutcheon, e-cylinder or wall reader, the software will automatically download the battery status and the event audit trail so that this information can be updated on the computer. This allows users to program for or plan maintenance when convenient and, if required, also provides management reports on user access movements around the building.

Main features and benefits

- **Computer managed** permitting the configuration of the electronic escutcheon, monitoring of access flows, record access, add and remove users and set up the user access profile.
- **The system can manage** up to 16000 users and 64000 doors.
- **7 different opening modes** to suit your needs (standard, free passage ability, free passage with automatic locking, automatic opening, Toggle, and timed Toggle).
- **30 time zones and 4 calendars, 680 door events** held in the electronic escutcheon / e-cylinder memory.
- **The system can be upgraded** simply by using a Portable Programming Device (PPD) making it possible to upgrade to a data on card SVN system when your needs change.
- **Multiapplication through the MIFARE carrier** enables use of existing MIFARE/DESFIRE cards.
How does it work?

The SALTO XS4 data on card access control system is designed for use in larger buildings and enables users to work in a wire-free environment so there is no need to hard wire. It allows you to control your entire building remotely and in almost real-time through the SALTO Virtual Network (SVN). This advanced software system allows standalone electronic escutcheons to read, receive and write information via its operating smart cards or ‘intelligent’ keys. This data is captured from the cards at SVN on-line IP Access points located at strategic points around the building. The “updating points” upload and download user-related information that is then used to permit, control or deny access.

Main features and benefits

- SALTO Virtual Network capabilities in all electronic escutcheons.
- Computer managed on-line and off-line doors with SQL database and a huge number of functions and capabilities.
- Up to 64000 users and 64000 doors in one unique system.
- More than 10 different opening modes to suit your needs (standard, free passage ability, free passage with automatic locking, automatic opening, toggle, timed toggle…).
- 256 time zones and 256 calendars, 1000 door events held in the electronic escutcheon / e-cylinder memory.
- Emergency openings can be performed through the PPD.
- Multiapplication through the MIFARE carrier enables use of existing MIFARE/DESFire cards.
XS4-[Access For]
On-line Wireless
Real-time access control

How does it work?
XS4 wireless is a new generation on-line access control system. It connects battery powered electronic escutcheons by means of low power radio transceivers (2.4 GHz) fitted on the inside of the escutcheons. These interact with XS4 gateways (which are connected by Ethernet/WIFI to the central management computer) and XS4 repeaters fitted in pre-defined XS4 wireless areas to provide a real time wireless access control network.

It can also carry out many of the functions that were previously done using a Portable Programming Device (PPD) or the SALTO Virtual Network (SVN). In the unlikely event that the radio link is interrupted, the escutcheons will continue to work but off-line, as with a standard SALTO escutcheon and all standard SVN functions will remain operative.

With a single click of a mouse you can configure or make changes to the network in real-time. You can also monitor the wireless network and escutcheons to: download audit trail information for real time control, delete users remotely and securely, collect battery status for maintenance and much more all from a single PC and all in real-time.

Main features and benefits
- Completely integrated with the SALTO platform making it easy to customise to your exact needs even in existing projects that are already running the SALTO system.
- Computer managed through SALTO Pro Access or HAMS SQL Software that permits:
  - The solving of key management problems in real-time with a simple mouse click. XS4 wireless escutcheons receive blacklist information and remove cancelled keys from the system in real-time.
  - Receive audit trail information in real-time and view door access without having to visit the door.
  - Real-time door control: This includes door alarm, intrusion alarm, single lock down and remote door opening.
  - Real-time battery control enables maintenance to view escutcheon power status in real-time.
  - Perform changes on the door set up remotely.
  - Highly secured meets RF IEEE 802.15.4 at 2.4GHz Standard and is AES 128Bit encrypted.
  - The SALTO wireless escutcheons continue to operate off-line with SALTO Virtual Net capabilities if the network crashes enabling users to access the building normally.
  - Enables users to benefit from all the features of the SALTO R&W system.
XS4 is the new access control platform from SALTO enabling users to control and manage a greater range of applications than ever before. Smart, secure and innovative, XS4 Comfort Electronic handle sets need no hard wiring and provide a totally wire free networked electronic locking solution with a great range of features.

The XS4-40 narrow version and the XS4-67 wide body version are specially designed to fit on most doors, and work with the majority of European, Scandinavian and ANSI mortise locks and some tubular latches.
Main features and benefits

- Simple off-line installation is possible on any type of door, including those with narrow frames.
- Virtual network capable through SALTO Virtual Network technology.
- Wireless real-time on-line capabilities through the SALTO wireless network*.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Contactless versions compatible with ISO 14443A, ISO 14443B and ISO 15693 (Vicinity) and covering a wide range of mainstream RFID brands such as DESFire, DESFireEV1, Mifare, Mifare plus, Legic, HID iClass and Inside Picopass allowing multi-application with third party systems using one card.
- SALTO 9000 contactless range is compatible with NFC (Near Field Communication) technology which allows NFC enabled cell phones to act as contactless data carriers to open and control SALTO access controlled doors.
- All communications between the carrier and the electronic lock are encrypted and secured.
- Choice of 40mm narrow or 67mm wide body handle set.
- Covers door thicknesses of between 30-115mm.
- Compatible with Mortise locks with axes distances of 47 to 110mm.
- The lock can always be opened from the inside (a single action panic feature works in conjunction with the relevant mortise lock).
- Available in 7mm, 7mm split, 8mm, 8mm split, 9mm (DIN 18273 certified), 9mm split and 7.6mm split spindle versions.
- High security protection via high resistance, hardened anti-drill plates to protect wiring and reader area. Additional protection provided by hardened axes and floating steel balls in the handle area.
- Concealed fixing screws for greater security and improved aesthetics.
- Low battery power indication monitored through the SALTO Virtual Network (SVN) as low battery status information is written onto carriers and passed to the software. Also readings can be taken at the lock and passed to the software via PPD connection.
- Emergency opening via portable programming device (PPD).
- Non volatile memory (memory is not deleted, even if power fails).
- Office mode (“passage” setting) available for leaving doors in free access mode.
- Available with mechanical cylinder cut outs for key override or access lock outs.
- Mechanical override with audit trail facility in some models.
- Firmware upgrade through PPD.
- DDA (Disability Discrimination Act) compliant (depending on handle type).

Technical data

- Current required:
  - XS4-40 narrow version: 3 alkaline batteries – LR03 - AAA 1,5V – Optional 3 Lithium batteries FR03 - AAA 1,5V (see environmental conditions).
  - XS4-67 wide version: 3 alkaline batteries – LR6 - AA batteries FR6 – AA 1,5V (see environmental conditions).

- Number of openings:
  - i-Button version: up to 90000 on 1 set of batteries.
  - Contactless versions: from 40000 to 70000 on 1 set of batteries, depending on the RFID technology.

- Environmental conditions:
  - External escutcheon: -20º / 70º.
  - Internal escutcheon: -20º / 70º (with Lithium batteries).

- Certifications:
  - Highest EN standards.
  - IP46 Protection rating in the case of i-Button and RFID.
  - UL 10C compliant (180 min steel doors, 90 min wooden doors).
  - EN1634-1 EI1. 60 Fire Resistant.

Access control features:

- Maximum number of users per door: 64000.
- Maximum number of doors in a system: 64000.
- Maximum events on lock audit: 1000.
- Time zones: 256.
- Time periods: 256.
- Calendars in system: 256.
- Zones in system: 1024.
- User groups: unlimited.

Available lock modes:

- Standard (locked at all times).
- Office mode (free passage).
- Timed office (automatic locking at end time).
- Automatic opening (8 pairs of “hands free” timed lock and unlocks per day with holidays).
- Toggle (present card to lock, present card to unlock).
- Timed toggle (present card to lock, present card to unlock depending on schedules).

*depending on the model
XS4 Networked Electronic Escutcheons for European Mortise Locks

**XS4 E40 narrow body version**
The XS4-40 narrow body version is specially designed to fit most Euro profile doors, even narrow profile framed doors and work with the majority of European mortise locks and cylinders.

**Main features**
- Clutch mechanism escutcheon when unlocked handle moves free.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Dimensions: 282mm x 40mm x 20mm.
- Handle rotation: 33º.
- Door thickness compatibility: 30mm to 115mm.
- Distance from the handle to the cylinder: 47mm to 110mm.
- Compatible with DIN mortise locks, European mortise locks and narrow style mortise lock.
- Compatible with European profile cylinders and Swiss profile cylinders.
- Square spindles available: 7mm, 7.6mm split, 8mm, 8mm split, 9mm and 9mm split.
- Mechanical override with audit trail facility available.
- Electronic privacy function through thumb turn or button on the inside.
- IP46 compliant.
- EN1634-1 EI60 Fire Resistant.
- UL 10C Compliant (90min wooden doors)

**XS4 E60 wide body version**
The XS4-60 wide version is specially designed to fit most Euro profile doors, and work with the majority of European mortise locks and cylinders. It is specially designed for use on busy, high traffic doors that need additional strength.

**Main features**
- Clutch mechanism escutcheon when unlocked handle moves free.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Dimensions: 290mm x 67mm x 20mm.
- Handle rotation: 52º.
- Door thickness compatibility: 30mm to 115mm.
- Distance from the handle to the cylinder: 47mm to 110mm.
- Compatible with DIN mortise locks, European mortise locks and narrow style mortise lock.
- Compatible with European profile cylinders, Swiss profile cylinders and some tubular latches.
- Square spindles available: 7mm, 7.6mm split, 8mm, 8mm split, 9mm and 9mm split.
- Mechanical override with audit trail facility available.
- Electronic privacy function through thumb turn or button on the inside.
- IP46 compliant.
- EN1634-1 EI60 Fire Resistant.
XS4 Networked Electronic Escutcheons for Scandinavian Mortise Locks

**XS4 S40 narrow body version**
The XS4-40 Scandinavian narrow body version is specially designed to fit most Scandinavian profile and narrow profile framed doors, and work with most Scandinavian mortise locks and cylinders.

**Main features**
- Clutch mechanism escutcheon when unlocked handle moves free.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Dimensions: 282mm x 40mm x 20mm.
- Handle rotation: 33°.
- Door thickness compatibility: 30mm to 115mm.
- Distance from the handle to the cylinder: 105mm.
- Compatible with Scandinavian modular mortise locks and narrow style mortise lock.
- Square spindles available 8mm, 8mm split.
- Electronic privacy function through thumb turn or button on the inside.
- IP46 compliant.

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**XS4 S60 wide body version**
The XS4-60 wide version is specially designed to fit most Scandinavian profile doors, and work with the majority of Scandinavian mortise locks and cylinders. It is specially designed for use on busy, high traffic doors that need additional strength.

**Main features**
- Clutch mechanism escutcheon when unlocked handle moves free.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Dimensions: 290mm x 67mm x 20mm.
- Handle rotation: 52°.
- Door thickness compatibility: 30mm to 115mm.
- Distance from the handle to the cylinder: 105mm.
- Compatible with Scandinavian modular mortise locks and narrow style mortise lock.
- Square spindles available 8mm, 8mm split.
- Electronic privacy function through thumb turn or button on the inside.
- IP46 compliant.
XS4 Networked Electronic Escutcheons

XS4 A60 ANSI wide body version
The XS4-60 wide body version for ANSI mortise locks is specially designed to be compatible with most ANSI mortise locks and tubular latches. It is specially designed for use on busy, high traffic doors that need additional strength.

Main features
- Clutch mechanism escutcheon when unlocked handle moves free.
- ID technologies available: i-Button, DESFire, DESFire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Dimensions: 290mm x 67mm x 20mm.
- Handle rotation: 52º.
- Door thickness compatibility: 32mm to 120mm.
- Distance from the handle to the cylinder: 61mm, 62mm and 63mm.
- Compatible with ANSI mortise locks and tubular latches.
- Square spindles available: 7mm, 7.6mm split, 8mm, 8mm split and 7mm diamond.
- Mechanical override with audit trail facility available.
- Electronic privacy function through thumb turn or button on the inside.
- IP46 compliant.
- UL 10C compliant (180 min steel doors, 90 min wooden doors).

XS4 Security narrow body version
The SALTO security range is an ideal choice for use on doors where a higher level of security protection is required. Their tough vandal resistant construction protects them against attack and unauthorised entry without losing flexibility or control.

Main features
- Clutch mechanism escutcheon that operates the deadbolt.
- ID technologies available: i-Button, DESFire, DESFire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Scandinavian modular mortise lock version available.
- Body and escutcheon made of steel.
- Dimensions: 280mm x 37mm x 20mm.
- Handle rotation: 30º.
- Door thickness compatibility: 30mm to 120mm.
- Distance from the handle to the cylinder: 47mm to 92mm.
- Compatible with DIN mortise locks, European mortise locks and narrow style mortise lock.
- Compatible with European profile cylinders, Swiss profile cylinders and some tubular latches.
- Square spindles available: 8mm and 9mm.
- IP46 compliant.
- UL 10C compliant (180 min steel doors, 90 min wooden doors).
XS4 Networked Electronic Escutcheons

**XS4 Glass door lock**
The XS4 glass door lock is stylish and modern. It’s exclusive design makes it compatible with a wide range of glass door designs, including those already fitted with a built-in lock. It’s ‘sandwich body’ design also makes for easy installation without having to replace the door.

**Main features**
- Block mechanism escutcheon.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Body and escutcheon made of steel.
- Dimensions: 148.5mm x 135mm x 38.5mm.
- Door thickness compatibility: 8mm to 12mm.
- Sandwich body design for an easy installation.
- Mortise lock incorporated in the electronic escutcheon.
- Available in satin stainless steel finish.

**XS4 Counter strike plate for SALTO glass door lock**
The XS4 counter strike plate for the SALTO glass door lock is designed to be used exclusively with the lock on doors with a glass frame. It’s ‘sandwich body’ design also makes for easy installation without having to replace the door.

**Main features**
- Body made of steel.
- Concealed fixing screws for a greater security and improved aesthetics.
- Dimensions: 164mm x 135mm x 38.5mm.
- Door thickness compatibility: 8mm to 12mm.
- Sandwich body design for an easy installation.
- Adjustable anti card system.
- Available in satin stainless steel finish.
XS4 Networked Electronic Escutcheons

**XS4 Double reader**
The XS4 double reader electronic escutcheon controls both entry and exit access of a door. Its audit trail facility can identify entry and exit actions and it can be fitted to almost any type of Euro profile door. It will also operate with a wide range of locks including Swiss cylinders.

**Main features**
- Body and escutcheon made of steel.
- Dimensions: 282mm x 40mm x 20mm.
- Handle rotation: 35º.
- Door thickness compatibility: 30mm to 115mm.
- Distance from the handle to the cylinder: 47mm to 110mm.
- Compatible with DIN mortise locks, European mortise locks.
- Available with cylinder cut out for a mechanical locking.
- Compatible with European profile cylinders, Swiss profile cylinders.
- Square spindles available: 8mm and 9mm.
- Option of cylinder cut out for mechanical override.
- ANSI mortise lock and Scandinavian modular mortise lock compatible models available.
- IP46 compliant.
- RF60 compliant.
- UL 10C compliant (90 min wooden doors).

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**XS4 Complementary escutcheon**
Specially designed to maintain the aesthetics of a door that does not need to be controlled, the new SALTO XS4 complementary escutcheon is available in a range of designs but contains no access control electronics.

**Main features**
- Body and escutcheon made of steel.
- Dimensions: 282mm x 40mm x 20mm.
- Handle rotation: 35º.
- Door thickness compatibility: 30mm to 115mm.
- Distance from the handle to the cylinder: 47mm to 110mm.
- Compatible with DIN mortise locks, European mortise locks.
- Available with cylinder cut out for a mechanical locking.
- Compatible with European profile cylinders, Swiss profile cylinders.
- ANSI mortise lock and Scandinavian modular mortise lock compatible models available.
- Square spindles available: 8mm and 9mm.
Handles
XS4 offers a wide choice of functional and styled design handles suitable for use on any type of door. Many of the lever handles have been designed to meet the latest DDA (Disability Discrimination Act) requirements, ensuring they are simple and easy to operate. Various finish options are available to allow for contemporary or classic styling to match any taste and design in décor, and to help in DDA impaired vision requirements.

Finishes
SALTO offers a wide range of finishes to choose from, including PVD coating and RAL colours. All finishes for handles and cover plates are made of stainless steel, including the PVD and antique brass finishes, with the exception of the O handle which is made of brass with a PVD coating and the cover plates made of stainless steel with a PVD coating.

Stainless steel finishes
- Satin Stainless Steel (IM)
- Polished Stainless Steel (IP)

Brass finishes
- Antique Brass (IA)
- Satin Brass PVD (PM)
- Polished Brass PVD (PP)

RAL colours
- Black
- White
- Other colours upon request

*Only available for ANSI and Scandinavian models.
The new XS4 on-line wireless solution delivers real-time high level security with all the convenience of battery operated access control.

It’s the perfect choice for applications that need a system with low power consumption, providing on-line control without any need to hard wire.

Simply set up the gateways (which are connected by Ethernet/WIFI to the controlling PC) and repeaters in pre-defined wireless zones and you’re ready to go. The battery powered escutcheons are configured automatically through their self-organizing capabilities and then use built-in low power (2.4 GHz) radio transceivers to communicate with the gateways and repeaters to create a real-time wireless access control network.

And if an escutcheon should lose RF connection at any time, thanks to its self-healing capabilities, it will automatically scan for a new connection to an alternative gateway or repeater, restoring communication and maintaining security.

**Main features and benefits**

- Wireless Radio Frequency based on IEEE 802.15.4 at 2.4Ghz.
- AES 128bits encryption.
- System managed through Pro Access SQL or HAMS SQL software.
- Self-organizing capabilities, the escutcheons automatically organize their structure in order to build up RF connections.
- Self-healing capabilities, the escutcheons automatically scan for a new connection if any repeater or gateway loses RF connection.
- SALTO Virtual Network technology included. The escutcheons will continue working, granting access control via SVN technology if the data network crashes or the PC is disconnected.
SALTO Wireless System

**Escutcheon**

The SALTO Wireless system is compatible with most common RFID technologies including Mifare, Mifare plus, DESfire, DESfire EV1, Inside Picopass, Legic, HID iClass. This makes integration easy and in most cases you can continue using your existing cards for all your applications.

Huge range of escutcheon styles and sizes including Scandinavian and ANSI models. SALTO wireless escutcheons are easy to install and configure.

**Main features**

- AES 128 bits encryption.
- Stand alone escutcheons can be upgraded to wireless system.
- ID technologies available: Mifare, Mifare plus, DESfire, DESfire EV1, Inside Picopass, Legic, HID iClass.
- Self-organizing and self-healing capabilities.
- Battery powered.
- Firmware updated via PPD.
- Completely integrated with SALTO platform. Works off-line with SALTO Virtual Network (SVN) technology if network communication with the computer fails.
- 1000 event audit trail back up if contact with PC is lost.

**Gateways**

The gateway is the link between the PC and the wireless network. Completely managed through SALTO Pro Access SQL or HAMS SQL software, it collects all the information sent by the repeaters and escutcheons that belong to the gateway.

**Main features**

- Wireless radio frequency based on IEEE 802.15.4 at 2.4Ghz.
- AES 128bits encryption.
- Connection to the PC RJ45 Ethernet.
- Voltage required 12V (adapter included, PoE version due to be released).
- Can manage several repeaters and many locks.
- Firmware update via software through Ethernet connection.

**Repeaters**

The repeater is a bridge between the gateway and other repeaters or escutcheons, where the distance to the escutcheon or where the number of escutcheons that must be linked to the gateway exceeds what is possible with a single gateway.

**Main features**

- Wireless radio frequency based on IEEE 802.15.4 at 2.4Ghz.
- AES 128bits encryption.
- Connection to the gateway and escutcheon through RF.
- Voltage required 12V (adapter included).
- Can manage up-to 4 other repeaters and many locks.
- Firmware update through PPD.
SALTO Advanced Panic Bar Solutions

SALTO Advanced panic bar solutions enable emergency exit doors equipped with panic bars to be controlled with an innovative stand alone electronic locking system.

SALTO stand alone electronic locks can be fitted, in combination with adaptor kits, to more than 40 leading panic bars from the most popular manufacturers.

Whether you have a mortise panic device or a rim panic device, SALTO has a solution.

Compliant with EN1125 depending on the panic bar, the lock and the SALTO panic bar kit.

All the benefits of SALTO but for emergency exits.

Main features and benefits

- Simple off-line installation is possible on any type of door, including those with narrow frames.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Available in wireless version for wireless real-time control*
- Choice of 40mm narrow or 67mm wide body handle set (depending on the panic bar compatibility).
- Suitable for door thicknesses of 30mm to 120mm.
- Concealed fixing screws for greater security and improved aesthetics.
- Available with mechanical override with audit trail facility.
- DDA (Disability Discrimination Act) compliant (depending on handle type).
- Emergency opening via portable programming device (PPD).
- Non volatile memory (memory is not deleted, even if power fails).

* Check compatibility chart, not all panic bar sets can be equipped with wireless technology.
XS4 SALTO Advanced Panic Bar Solutions

**XS4 SALTO Panic bar PBE9000**

XS4 PBE9000 combines the highest safety standards with ease of use. XS4 PBE9000 series panic bar is EN1125 compliant* in combination with SALTO electronic escutcheons, LE7E31 or LE9E11 SALTO mortise lock, SALTO KPB (Kit Panic Bars). Its modern, aesthetic design makes it the perfect choice to compliment any architectural style.

**Main features**
- Mortise panic device.
- Mechanisms made of galvanized steel.
- Cover made of satin stainless steel or plastic depending on the finish.
- Finishes: red, green or satin stainless steel (stainless steel version).
- Handing Din left /Din right usable.
- Maximum wing width: 1300mm.
- Cover dimensions: 200mm x 35mm x 108.5mm.
- Spindle angle turn: 30° or 45° depending on the model.
- Square spindle: 9mm.

**Access control features**
- Maximum number of users per door: 64000.
- Maximum number of doors in a system: 64000.

**Technical data**
- Current required:
  - XS4-40 narrow version: 3 alkaline batteries - LR03 - AAA 1.5V – Optional 3 Lithium batteries FR03 - AAA 1.5V (see environmental conditions).
  - XS4-67 wide version: 3 alkaline batteries - LR6 - AA batteries FR6 – AA 1.5V (see environmental conditions).
- Environmental conditions:
  - External escutcheon: -20° / 70°.
  - Internal escutcheon: -20° / 70° (with Lithium batteries).
- Certifications:
  - Highest EN standards including EN1125*.
  - IP46 Protection rating in the case of i-Button and RFID.

**Available lock modes**
- Standard (locked at all times).
- Office mode (free passage).
- Timed office (automatic locking at end time).
- Automatic opening (8 pairs of “hands free” timed lock and unlocks per day with holidays).
- Toggle (present card to lock, present card to unlock).
- Timed toggle (present card to lock, present card to unlock depending on schedules).

**XS4 SALTO Panic bar kits**

XS4 SALTO KPBs (Kit Panic Bars) make it possible to fit stand alone electronic escutcheons in combination with panic bars. SALTO has developed a wide range of KPBs that are compatible with the most popular panic bars on the market.

**Main features**
- 28 different kits.
- Compatible with over 40 types of panic bar.
- 2 different finishes, satin stainless steel or polished stainless steel.
- Door thickness compatibility: 30mm to 120mm.

*Check compatibility chart to find out which combination of SALTO panic bars are EN1125 compliant.
The SALTO XS4 thumb turn E-cylinder developed together with the leading European cylinder manufacturer EVVA, is an excellent access control solution for those doors where fitting an electronic escutcheon may not be possible i.e. on an antique door or in a listed building.

The E-cylinder can be upgraded from a self programmable system to the high performance data on card system with SALTO Virtual Network capabilities, making it the most complete and versatile electronic cylinder available on the market.
Main features and benefits
- Simple off-line installation is possible on any type of door, including those with narrow frames.
- Virtual network capable through SALTO Virtual Network technology.
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Contactless versions compatible with ISO 14.443A, ISO 14.443B and ISO 15.693 (Vicinity) and covering a wide range of mainstream RFID brands such as DESfire, DESfire EV1, Mifare, Mifare plus, HID iClass and Inside Picopass allowing multiplexing with third party systems using one card.
- SALTO Z9000 E-cylinder contactless range is compatible with NFC (Near Field Communication) technology which allows NFC enabled cell phones to act as contactless data carriers to open and control SALTO access controlled doors.
- All communications between the carrier and the electronic cylinder are encrypted and secured.
- Choice of 3 different cam cylinder profiles: Euro profile, Swiss round profile (RP22) and UK oval profile.
- 6 different finishes: Satin nickel, satin chrome, polished chrome, polished brass, brown patinized and black patinized.
- Cylinders can be numbered.
- The E-cylinder can always be opened from the inside (a single action panic feature works in conjunction with the relevant mortise lock).
- High security via high resistance, hardened anti-drill protection.
- Concealed fixing screws for greater security and improved aesthetics.
- Low battery power indication monitored through the SALTO Virtual Network (SVN) as low battery status information is written onto carriers and passed to the software. Also readings can be taken at the lock and passed to the software via PPD connection.
- Dual colour LED (green / red) to indicate access authorization.
- Emergency opening by means of portable programming device (PPD).
- Non volatile memory (memory is not deleted, even if power fails).
- Firmware upgradable through PPD.

Technical data
- Current required:
  - 1 Lithium standard battery CR 123A.
- Number of openings:
  - i-Button version: up-to 90000 on 1 battery.
  - Contactless versions: from 30000 to 50000 on 1 battery, depending on the RFID technology.
- Environmental conditions:
  - External knob: -20º / 65º.
  - Internal knob: -20º / 65º.
- Certifications:
  - VdS Class B2 compliant (optional).
  - IP65 protection rating in the case of i-Button and IP54 (optional) in the case of RFID.
  - SKG*** compliant
  - EN1634 - E690 fire resistant.

Access control features:
- Maximum number of users per door: 64000.
- Maximum number of doors in a system: 64000.
- Maximum events on lock audit: 1000.
- Time zones: 256.
- Time periods: 256.
- Calendars in system: 1024.
- User groups: unlimited.
- Available lock modes:
  - Standard (locked at all times).
  - Automatic opening (8 pairs of “hands free” timed lock and unlocks per day with holidays).
  - Toggle (present card to lock, present card to unlock).
  - Timed toggle (present card to lock, present card to unlock depending on schedules).
**Main features**

- Clutch mechanism knob.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, HID iCLASS.
- Body and knob made of solid brass.
- Door thickness compatibility from 54mm up to 192mm.
- Special door thickness up to 392mm.
- Cylinder length from 27mm up to 196mm in steps of 5mm.
- Different cam options: DIN cam for Euro profiles, small cam (RP22) for Euro profile, double cam for Biffar doors in Euro profile, Cog wheel 10 teeth and Cog wheel 18 teeth.
- Optional VdS certificate compliant.

**XS4 E-cylinder Euro profile**
The XS4 E-cylinder European profile is specially designed to fit most Euro doors that are equipped with a European profile cylinder mortise lock.

**XS4 E-cylinder Round Swiss profile**
The XS4 E-cylinder round profile is specially designed to fit most doors that are equipped with a Swiss profile cylinder mortise lock.

**Main features**

- Clutch mechanism knob.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, HID iCLASS.
- Body and knob made of solid brass.
- Door thickness compatibility from 54mm up to 192mm.
- Special door thickness up to 392mm.
- Cylinder length from 27mm up to 196mm in steps of 5mm.
- Different cam options: Small cam (RP22) for Swiss profile and Cog wheel 10 teeth.
**XS4 E-cylinder**

**XS4 E-cylinder UK oval profile**
The XS4 E-cylinder oval profile is specially designed to fit most doors that are equipped with a UK oval profile cylinder mortise lock.

**Main features**
- Clutch mechanism knob.
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, HID iCLASS.
- Body and knob made of solid brass.
- Door thickness compatibility: from 54mm up to 192mm.
- Special door thickness up to 392mm.
- Cylinder length from 27mm up to 196mm in steps of 5mm.
- Different cam options: UK oval cam.

**Finishes**
SALTO offers a wide range of finishes to choose from.

- CR – Satin Chrome
- NI – Satin Nickel
- CP – Polished Chrome
- MP – Polished Brass
- PB – Brown (Patinized)
- PS – Black (Patinized)
Access control requires a good, reliable door locking system. SALTO offers a wide range of mortise locks in order to ensure that the door is correctly locked.

Whether you need ANSI mortise locks, Euro locks for wooden doors or narrow profiles, DIN locks, cylindrical cartridge latches or automatic locks with privacy and panic functions, SALTO has the locking system you need. Our complete range of mortise locks enable you to install SALTO electronic escutcheons and cylinders correctly without compromising security.

Main features and benefits

- Lock case, latch and deadbolt made of steel.
- Possibility of ANSI, Euro locks, DIN locks (distances 72, 85 and 92mm) and cylindrical latches.
- Wide range of back sets and front plate configurations to fit most doors.
- Optional panic function for greater security of the users or guests.
- Equipped with auxiliary latch (anti card system) to prevent unwanted intrusions.
- Highest certifications compliant*.
- With automatic deadbolt or latch through in option.
- Optional with deadbolt detector for electronic privacy function.

*Depending on the mortise lock model the certifications can vary
XS4 Mortise Locks

XS4 EURO lock (axe distances 85mm.)
The XS4 Euro lock is a mortise lock with latch projection which means the latch is automatically projected and deadlocked when the door is closed. This mortise lock is suitable for all kinds of wooden door whether it’s a hotel room, office or warehouse door etc. The new latch projection function increases security by making it impossible to gain access by using plastic cards. For additional security SALTO also offers the option to order this lock with a deadbolt.

Main features
- Lock case, latch and deadbolt made of steel.
- Axes distances 85mm.
- Euro profile cylinder compatible.
- 8mm square spindle.
- Turning angle 30°.
- Different backsets.
- Choice of finishes: satin stainless steel or gold enamelled.
- Reversible latch and auxiliary latch (anticard).
- With auxiliary latch (anticard) it deadlocks the latch.
- The handle retracts the latch to normal position.
- Panic function option (The handle retracts the latch and the deadbolt).
- Deadbolt detector option for electronic privacy function.
- Mortise lock EN 12209 Grade 3 (high frequency of use or with care, use in public buildings).
- Mortise lock EN179 Grade 3* (Suitable for use in busy, high traffic areas).
- EN-1634 Certificated EI60 fire resistant.
- Round or squared front plate available.

XS4 EURO lock DIN (axe distances 72mm.)
SALTO offers 2 different DIN 18250 mortise locks suitable for all kinds of wooden doors that need to be compatible with DIN standards. The locks are automatic locks that project the deadbolt when the door is closed for greater security. For user safety the mortise locks also have a panic function so they can be opened from the inside in case of emergency.

Main features
- Lock case, latch and deadbolt made of steel.
- Axes distances 72mm.
- DIN 18250 locks.
- Euro profile cylinder compatible.
- 8mm or 9mm square spindle*.
- Turning angle 30° or 45° depending the model.
- Different backsets.
- Satin stainless steel finish.
- Automatic lock, the auxiliary latch (anticard) projects and deadlocks the deadbolt*.
- The handle retracts the latch and the deadbolt to normal position.
- Panic function option (The handle retracts the latch and the deadbolt simultaneously).
- Round or squared front plate available*.
- Highest standards *
- EN1125 compliant*.

*Depending the model
XS4 Mortise Locks

XS4 Narrow profile EURO lock
(axe distances 92mm.)
SALTO offers 2 different mortise locks suitable for narrow profile doors.

<table>
<thead>
<tr>
<th>Main features</th>
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</thead>
<tbody>
<tr>
<td>- Lock case, latch and deadbolt made of steel.</td>
</tr>
<tr>
<td>- Axes distances 92mm.</td>
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<tr>
<td>- Euro profile cylinder compatible.</td>
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<tr>
<td>- 8mm or 9mm square spindle*.</td>
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<tr>
<td>- Turning angle 30°.</td>
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<tr>
<td>- Different backsets.</td>
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<tr>
<td>- Satin stainless steel finish.</td>
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<tr>
<td>- Reversible latch.</td>
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<tr>
<td>- Automatic lock, the auxiliary latch (anticard) projects and deadlocks the deadbolt*.</td>
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<tr>
<td>- The handle retracts the latch and the deadbolt simultaneously - panic function*.</td>
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<tr>
<td>- Satin stainless steel finish.</td>
</tr>
<tr>
<td>- Reversible latch.</td>
</tr>
<tr>
<td>- Automatic lock, the auxiliary latch (anticard) projects and deadlocks the deadbolt*.</td>
</tr>
<tr>
<td>- The handle retracts the latch and the deadbolt simultaneously - panic function*.</td>
</tr>
<tr>
<td>- Satin stainless steel finish.</td>
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<tr>
<td>- Reversible latch.</td>
</tr>
<tr>
<td>- Automatic lock, the auxiliary latch (anticard) projects and deadlocks the deadbolt*.</td>
</tr>
<tr>
<td>- The handle retracts the latch and the deadbolt simultaneously - panic function*.</td>
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</table>

SALTO XS4
Cartridge cylindrical latch
With the SALTO XS4 cylindrical latch you can replace existing traditional knob sets, and upgrade them with a state of the art electronic access control system. SALTO Cartridge cylindrical latches are ANSI A156.2 Grade 1 or 2, depending on the model and enable users to replace old cylindrical or tubular latches for new high quality ones compatible with SALTO electronic escutcheons.

<table>
<thead>
<tr>
<th>Main features</th>
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</thead>
<tbody>
<tr>
<td>- Cartridge, latch and deadbolt made of steel.</td>
</tr>
<tr>
<td>- ANSI A156.2 Grade 1 or 2 cylindrical latches.</td>
</tr>
<tr>
<td>- With auxiliary latch (anticard) that deadlocks the latch.</td>
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<tr>
<td>- 8mm square spindle.</td>
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<tr>
<td>- Turning angle 54°.</td>
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<tr>
<td>- Different backset lengths 60mm, 70mm, 95mm and 127mm.</td>
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<tr>
<td>- Choice of finishes satin stainless steel or polished brass.</td>
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<tr>
<td>- Squared front plate.</td>
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<tr>
<td>- UL listed 3 hours fire rating.</td>
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</tbody>
</table>

*Depending on the model

model LE9E

model LC2M

Cylindrical cartridge

Cylindrical latch
XS4 Mortise Locks

SALTO XS4 ANSI mortise lock
Specially designed for those doors that need an ANSI mortise lock ANSI A 156.13 Grade 1 this lock is a balance between ease of use, security and warranty.

Main features
- Lock case made of stamped steel.
- Stainless steel latch.
- 8mm square spindle.
- Turning angle 54°.
- Choice of finishes satin stainless steel or gold polished brass.
- Adjustable bevel.
- ANSI A 156.13 Grade 1 compliant for heavy commercial, institutional and industrial use.
- UL Listed 3 hours fire rating.

SALTO XS4 ANSI mortise lock with deadbolt
Specially designed for those doors that need an ANSI mortise lock ANSI A 156.13 Grade 1 and a privacy function with a deadbolt, for hospitality purposes.

Main features
- Lock case made of stamped steel.
- Lever retracts deadbolt and latch simultaneously (panic function).
- Stainless steel latch and deadbolt.
- 8mm square spindle.
- Turning angle 54°.
- Choice of finishes satin stainless steel or gold polished brass.
- Adjustable bevel.
- ANSI A 156.13 Grade 1 compliant for heavy commercial, institutional and industrial use.
- UL Listed 3 hours fire rating.

model LA1M05

model LA1M15
XS4

Wall Readers

SALTO offers a wide range of wall readers that in combination with SALTO Door Controllers enable the expansion of SALTO access control benefits to all those doors where a stand alone electronic lock cannot be fitted i.e. barriers, elevators, mechanical doors etc, or where control must be boosted by on-line real-time access control.

The wall readers read encrypted data contained on the carrier and communicate it to the door controller. They also allow for updating of the carrier via SALTO Virtual Network technology making it possible to cancel lost or stolen cards remotely.

Suitable for outdoor installation, the SALTO wall reader range also includes narrow profile wall readers that can be installed in the frame of a door.
Main features and benefits

- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iCLASS.
- Off-line or On-line depending on the door controller connected.
- Virtual Network capability through SALTO Virtual Network technology.
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Contactless versions compatible with ISO 14.443A, ISO 14.443B and ISO 15.693 (Vicinity) and covering a wide range of mainstream RFID brands such as DESfire, DESfire EV1, Mifare, Mifare plus, Legic, HID iClass and Inside Picopass allowing multi-application with third party systems using one card.
- SALTO 9000 contactless range is compatible with NFC (Near Field Communication) technology which allows NFC enabled cell phones to act as contactless data carriers to open and control SALTO access controlled doors.
- All communications between the carrier and the wall reader are encrypted and secured.
- Can be flush or surface mounted depending on the base (available separately)*.
- Available in a narrow profile version for special doors.
- Red and green coloured LED to indicate lock authorization.
- Blue coloured LED to indicate carrier updating.
- For external use and protection against vandalism it can be used with the WRMFWAV frame and flush mounting base*.
- Can be combined with Personal Identification Number (PIN) code pad for card authentication*.
- Compatible with standard electrical back boxes for easy fitting*.
- Can be used for integration with other systems through the addition of the Wall Reader Adaptor or Control Unit Adaptor.

* For Modular Wall Reader range only.
XS4 Wall Readers

XS4 i-Button modular wall reader
The i-Button SALTO modular wall reader reads data from the carrier and then communicates it to the door controller. It also allows for updating of the carriers via SALTO Virtual Network technology. The reader is IP46 compliant making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

Main features
- Body made of die cast Zinc Alloy.
- Reader made of stainless steel.
- IP 46 compliant.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs with a twisted pair cable.
- Dimensions: 83mm x 83mm x 16mm (W x H x D).
- Connection to the door controller using UTP CAT 5 cable.
- Current required: 5V supplied by the door controller.
- For surface mounting with the WRMBH.
- For flush mounting with WRMBL.

XS4 i-Button wall reader for narrow profile applications
The i-Button slim wall reader for flush mounting, has been specially designed to fit doors that have a narrow profile frame and where there is insufficient space to install a standard wall reader. The wall reader reads data from the carrier and then communicates it to the door controller. It also allows for updating of the carriers via SALTO Virtual Network technology. The reader is IP46 compliant making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

Main features
- Reader and body made of stainless steel.
- IP 46 compliant.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs with a twisted pair cable.
- Dimensions: 40mm x 90mm x 7mm (W x H x D).
- Connection to the door controller using UTP CAT 5 cable.
- Current required: 5V supplied by the door controller.
XS4 Wall Readers

XS4 i-Button modular wall reader for special wall mounting
The i-Button SALTO modular wall reader with external case is specially designed for outdoor installation on uneven surfaces. This wall reader reads data from the carrier and then communicates it to the door controller. It also allows for updating of the carriers via SALTO Virtual Network technology.

The reader is IP46 compliant and features a built-in stainless steel external case making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

Main features
- Body made of die cast Zinc Alloy.
- Reader and external case made of stainless steel.
- IP 46 compliant.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs with a twisted pair cable.
- Dimensions: 120mm x 120mm x 80mm (W x H x D).
- Connection to the door controller using UTP CAT 5 cable.
- Current required: 5V supplied by the door controller.

XS4 i-Button modular wall reader for special wall mounting with key pad
The i-Button SALTO modular wall reader with key pad includes a PIN Key Pad specially designed for outdoor installation on uneven surfaces. The key pad provides increased security as dual identification is needed to access the door. This wall reader reads data from the carrier and then communicates it to the door controller.

It also allows for updating of the carriers via SALTO Virtual Network technology.

The reader is IP46 compliant and features a built-in stainless steel external case making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

Main features
- Body made of die cast Zinc Alloy.
- Reader and external case made of stainless steel.
- Built in PIN Key Pad for card authentication.
- IP 46 compliant.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs with a twisted pair cable.
- Dimensions: 120mm x 230mm x 80mm (W x H x D).
- Connection to the door controller using UTP CAT 5 cable.
- Current required: 5V supplied by the door controller.

* Depends on the door controller combination.
XS4 Wall Readers

XS4 RFID modular wall reader
SALTO offers a broad range of 13.56Mhz RFID Contactless Smart Card wall readers. They read encrypted data from the carriers and then communicate it to the door controllers. They also allow for updating of the carriers via SALTO Virtual Network technology.

All models are IP 46 compliant making them suitable for use indoors and out, including environments exposed to harsh weather conditions. Compatible with ISO 14.443A, ISO 14.443B and ISO 15.693 (Vicinity) and covering a wide range of mainstream RFID brands such as Mifare, Mifare plus, DESfire, DESfire EV1 Legic, HID iClass and Picopass.

· ID technologies available: DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
· Contactless reading of the carrier.
· Reading distance up to 50mm depending on the RFID technology.
· NFC compatible (WRM9000 range)
· IP 46 compliant.
· The maximum cable length between the door controller and the wall reader is up to 100mtrs with a twisted pair cable.
· Dimensions: 83mm x 83mm x 13.5mm (W x H x D).
· Connection to the door controller using UTP CAT 5 cable.
· Current required: 5V supplied by the door controller.
· For surface mounting with the WRMBH.
· For flush mounting with WRMBL.

XS4 RFID wall reader for narrow profile applications
The SALTO contactless slim wall reader for flush mounting, has been specially designed to fit doors that have a narrow profile frame and where there is insufficient space to install a standard wall reader.

The wall reader reads data from the carrier and then communicates it to the control unit. They also allow for updating of the carriers via SALTO Virtual Network technology.

The reader is IP46 compliant and features a built-in heater making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

Main features
- ID technologies available: DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Reader made of PC + ABS UL94.
- Body made of 2mm stainless steel plate.
- NFC compatible (WRM9001FS).
- IP 46 compliant.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs with a twisted pair cable.
- Dimensions: 34mm x 114mm x 19mm (W x H x D).
- Connection to the door controller using UTP CAT 5 cable.
- Current required: 5V supplied by the door controller.
- For surface mounting with the WRM9001.
- For flush mounting with WRMBL.

* Depends on the door controller combination.
XS4 Wall Readers

XS4 RFID modular wall reader for special wall mounting

The Contactless SALTO modular wall reader with external case is specially designed for outdoor installation on uneven surfaces. The wall reader reads data from the carrier and then communicates it to the door controller. It also allows for updating of the carriers via SALTO Virtual Network technology.

The reader is IP46 compliant and features a built-in stainless steel external case making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

ID technologies available: DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.

- Contactless reading of the carriers.
- Reading distance up to 50mm depending on the RFID technology.
- External case made of stainless steel.
- Dimensions: 120mm x 230mm x 80mm (W x H x D).
- IP 46 compliant.
- Connection to the door controller using UTP CAT5 cable.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs*, with a twisted pair cable.
- Current required: 5V supplied by the door controller.

XS4 RFID modular wall reader for special wall mounting with key pad

The Contactless SALTO modular wall reader with key pad is a wall reader that includes a PIN Key Pad specially designed for outdoor installation on uneven surfaces. The key pad provides increased security as dual identification is needed to access the door.

The wall reader reads data from the carrier and then communicates to the door controller. It also allows for updating of the carriers via SALTO Virtual Network technology.

The reader is IP46 compliant and features a built-in stainless steel external case making it suitable for use indoors and out, including environments exposed to harsh weather conditions.

ID technologies available: DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.

- Contactless reading of the carriers.
- Reading distance up to 50mm depending on the RFID technology.
- NFC compatible (WRM9000 range).
- External case made of stainless steel.
- Dimensions: 120mm x 120mm x 80mm (W x H x D).
- IP 46 compliant.
- Connection to the door controller using UTP CAT5 cable.
- The maximum cable length between the door controller and the wall reader is up to 100mtrs*, with a twisted pair cable.
- Current required: 5V supplied by the door controller.

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model WRM9001E

model WRM9001EK
XS4 Wall Reader Accessories

XS4 WRM Key pad
Compatible with SALTO modular wall readers*, the WRMKP key pad allows for the additional use of a Personal Identification Number (PIN) key pad option. It should be mounted on one of the SALTO WRM double mount bases.

Main features
- PIN code authentication needed with ID carrier to gain access and obtain card update.
- Door code only option for non key holders.
- PIN needed for SVN key update.
- Timed PIN option for ID carriers only operation and then ID carrier plus PIN use.
- Body made of die cast Zinc Alloy with satin chrome finishing.
- Keys made of AISI 316L stainless steel.
- Size: 83mm x 83mm x 13,5mm (W x H x D).
- Current required 5V supplied by the Modular Wall Reader.
- For surface mounting with WRMBH2.
- For flush mounting with WRML2.
- Connection to the wall reader with a built in cable.

models WRM9001 and WRMKP
* Check for compatibility.

XS4 WRM Pedestal
Smart, innovative and designed with aesthetics in mind, the SALTO Modular Wall Reader Pedestal is a new product developed to allow for the installation of readers and controllers in places where they cannot normally be fitted, such as on door frames or walls.

Suitable for indoor use, the Modular Wall Reader Pedestal can be fitted with any model of SALTO wall reader and 5000 door controller series. Made of AISI316L bright polished stainless steel and DDA compliant, the Modular Wall Reader Pedestal is suitable for use in a wide range of environments including Hospitals, Airports, Universities, Schools, etc.

Main features
- Made of stainless steel AISI 316L bright polished.
- Dimensions 271mm x 1495mm x 235mm (W x H x D).
- DDA compliant optional.
- Personal Identification Number (PIN) keypad option.
- Special base cut out for easier installation.
- Compatible with CU5000, CU50EN and CU50ENSVN.

models WRMPE9SK

* Check for compatibility.
XS4 Wall Reader Accessories

WRMF WAV antivandalic frame for SALTO modular wall readers
This accessory has been designed to protect the WRM wall reader from adverse and harsh environments.

Main features
- Made of die cast Zinc Alloy with Satin Chrome finishing.
- Fastened with Torx 10 Anti Tamper screws.
- To be fitted with WRM BLE (included with the WRMFWAV).

Mounting bases for modular wall readers
SALTO offers several base options to fit modular wall readers. Depending on your needs you can choose a single or double base to fit a wall reader and a key pad. Both bases include an internal gasket to prevent water ingress and have several fixing points to allow for adjustment during installation.

Single and double bases for surface mounting

Single and double bases for flush mounting

model WRM 9001 & WRMFWAV
SALTO offers a wide range of door controllers that enable the expansion of SALTO access control benefits to all those doors where a stand alone electronic escutcheon cannot be fitted such as electric strikes, magnets, barriers, lifts, shutters, automatic door openers, speed gates, etc, or where control must be boosted by on-line real time access control.

The door controllers read encrypted data contained on the carrier and allow for updating of the carrier via SALTO Virtual Network technology making it possible to cancel lost or stolen cards remotely.

Whether you need a simple off-line or on-line door controller with SALTO Virtual Network capabilities, and with one relay output or several, SALTO has what you need.
Main features and benefits

- Off-line or on-line door controllers depending on the model.
- Managed by software.
- Virtual Network capable through SALTO Virtual Network technology.
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- All communications between the wall reader and the door controller and between the door controller and the PC are secured and encrypted for a higher security level.
- No additional control panels are required.
- Alarm input.
- Set up made with Portable Programming Devices (PPD) or directly from the PC*.
- Update made with Portable Programming Device (PPD) or SVN.
- Anti Pass Back mode available depending on the model.
- Firmware upgradable by means of PPD or directly from the PC on the on-line units.
- User on card audit trailing via SALTO Virtual Network in the case of off-line units.

Technical data

- Current required:
  - 12V / 500mA 6VA adaptor included.
- Connection to the wall reader:
  - UTP CAT 5 standard cable.
- Relay output:
  - Maximum current of the contact to relay 16A at 250VAC with resistive loads and 8 A at 250VAC with inductive loads and 16A at 24VDC.
- Cabling to the relay:
  - Any kind of cable that supports the load.
- Temperature:
  - -20°C to 80°C.

Access control features:

- Maximum number of users per door: 64000.
- Maximum number of doors in a system: 64000.
- Maximum events on the door controller: 1000 (CU2010 and CU5010) 3000 (CU5000, CU50EN and CU50ENSVN).
- Time zones: 256.
- Time periods: 256.
- Calendars in system: 256.
- Zones in system: 1024.
- User groups: unlimited.

Available lock modes:

- Standard (locked at all times).
- Office mode (free passage).
- Timed office (automatic locking at end time).
- Automatic opening (8 pairs of "hands free" timed lock and unlocks per day with holidays).
- Automatic opening + office:*
- Toggle (present card to lock, present card to unlock).
- Timed toggle (present card to lock, present card to unlock depending on schedules).
- Toggle + automatic opening.
- Keypad only:*
- Timed keypad:*
- Key + PIN:*
- Timed keypad + PIN:*
- Automatic changes:*

** For IP door controllers only.
* Depending on the model.
XS4 Door Controllers

CU2010
Designed for use with the SALTO WRM1000 wall reader, the off-line CU2010 is a relay output door controller that can be connected to the WRM1000 wall reader. It offers a single wall reader connection and a single output control relay.

Main features
- Off-line door controller.
- One wall reader connection.
- One relay output.
- Only for use with the WRM1000 wall reader.
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Request to exit (RTE) switch input.
- Door state input.

Certificates
- CE EN 55022 (1994), Class B.
- CE EN 50082 (1997).

CU5010
Designed for use with the SALTO WRM8001 wall reader, the off-line CU5010 is a relay output door controller that can be connected to one wall reader. It offers a single wall reader connection and a single output control relay.

Main features
- Off-line door controller.
- One wall reader connection.
- One relay output.
- Only for use with the WRM8001 wall reader.
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Request to exit (RTE) switch input.
- Door state input.

Certificates
- CE EN 55022 (1994), Class B.
- CE EN 50082 (1997).
XS4 Door Controllers

**CU5000**
The SALTO CU5000 is a single door off-line door controller that can have 1 or 2 wall readers connected and has 2 control relay outputs.

**Main features**
- Off-line door controller.
- Two wall reader connections, read in – read out locking, and has Anti Pass Back mode available by connecting 2 wall readers.
- Two relay output.
- Upgradable to CU50EN or CU50ENSVN.
- Compatible with SALTO relay extension board (EB5008) controlling up to 128 relay outputs suitable for elevators, etc.
- To be used with all SALTO wall readers (excepted WRM1000).
- Can be used with the SALTO WRMKP for dual identification (Carrier + PIN).
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Request to exit (RTE) switch input.
- Door monitoring and tamper monitoring via contacts input.
- Door state input.

**Certificates**
- CE EN 55022 (1994), Class B.
- CE EN 61000-6-1 (2001).
- CE EN 61000-6-2 (2001).
- CE EN 61000-4-3 (1995).

**CU50EN**
The SALTO CU50EN is an on-line IP door controller that can have 1 or 2 wall readers connected and has 2 control relay outputs. Access control changes can be carried out on the SALTO software and are then actioned at the door controller in real time. It provides full on-line features via the networked Ethernet / WIFI link such as door monitoring status, remotely controlling door opening and Roll Call.

**Main features**
- On-line IP door controller.
- Two wall reader connections, read in – read out locking, and has Anti pass back mode available by connecting 2 wall readers.
- Two relay output.
- Upgradable to CU50ENSVN.
- Compatible with SALTO relay extension board (EB5008) controlling up to 128 relay outputs suitable for elevator etc.
- To be used with all SALTO wall readers (excepted WRM1000).
- Can be used with the SALTO WRMKP for dual identification (Carrier + PIN).
- Request to exit (RTE) switch input.
- Door monitoring and tamper monitoring via contacts input.
- Door state input.

**On-line features:**
- Real-time access control changes:
  - Live monitoring of user entry and exit through the door controller.
  - Live audit trail build up on the software.
  - Door monitoring status for forced door and door left open alarm.
  - Remote door opening from software.
  - Door lock out, or lock open emergency setting from software.
  - The IP door controller can be included in roll call set up used, for example for user location monitoring, parking control etc.
- Works as on-line hub up to 40 on-line Energy Saving Devices.
- Connected to standard Ethernet / WIFI network.
- Works off-line if the network connection is lost.
- All the communications between the IP door controller and the PC are secured and encrypted. In addition the CU is protected by a 3DES encrypted challenge / response for a higher security level.
- Invalidates deleted cards.

**Certificates**
- CE EN 55022 (1994), Class B.
- CE EN 61000-6-1 (2001).
- CE EN 61000-6-2 (2001).
- CE EN 61000-4-3 (1995).
XS4 Door Controller

CU50ENSVN

The SALTO CU50ENSVN is an on-line door controller that can have 1 or 2 wall readers connected, has 2 control relay outputs and has SALTO Virtual Network (SVN) capabilities.

Cards are automatically updated with the latest changes in the access plan, it records the user audit into the PC and provides advanced information on battery status. It also continually updates the cancelled ID carrier black list simply by using the cards on the network, distributing the latest access information throughout the building via the off-line stand alone locks.

Access control changes can be carried out on the SALTO software and these are then actioned at the control units in real time. It provides full on-line features via the networking live link such as door monitoring status, remotely controlling door opening and Roll Call.

Main features

- On-line IP door controller.
- Two wall reader connections, read in – read out locking, and has Anti Pass Back mode available by connecting 2 wall readers.
- Two relay output.
- Upgradable to CU50ENSVN.
- Compatible with SALTO relay extension board (EB5008) controlling up to 128 relay outputs suitable for elevators, etc.
- To be used with all SALTO wall readers (excepted WRM1000).
- Can be used with the SALTO WRMKP for dual identification (Carrier + PIN).
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Request to exit (RTE) switch input.
- Door monitoring and tamper monitoring via contacts input.
- Door state input.

SALTO Virtual network capabilities:

- Add or delete access privileges at will to the ID carriers.
- The ability to validate the expiry date of key cards on any SVN on-line wall reader.
- Add security through additional authenticated validation procedures including pin codes as well the ability to blacklist cards from the system.
- On card audit-trailing to track staff or visitor movement.
- Lock specific battery power data is registered on any card using the lock – staff or visitor – and transferred back to the PC control software via any update reader just by using the system.
- Expiry date can be extended if network connection is lost.

On-line features:

- Real time access control changes:
  - Live monitoring of user entry and exit through the door controller.
  - Live audit trail build up on the software.
  - Door monitoring status for forced door and door left open alarms.
  - Remote door opening from software.
  - Door lock out, or lock open emergency setting from software.
  - The IP door controller can be included in roll call set up used, for example for user location monitoring, parking control etc.
- Works as on-line hub up to 40 on-line Energy Saving Devices.
- Connected to standard Ethernet /WIFI network.
- All the communications between the control unit and the PC are secured and encrypted. In addition the IP door controller is protected by a 3DES encrypted challenge / response for a higher security level.

Certificates:

- CE EN55022 (1994), Class B.
- CE EN 61000-6-1 (2001).
- CE EN 61000-6-2 (2001).
- CE EN 61000-4-3 (1995).
**XS4 Door Controller**

**EB5008 SALTO**

**multi relay output control board**

The EB5008 is a device which, when connected to CU5000, CU50EN or CU50ENSVN door controllers, provides the option to manage multi relay switchable output systems such as elevator floor level access, multi shutter and barrier systems, machine switching etc.

**Main features**

- Up to 16 EB5008’s can be connected in series to 1 door controller, allowing you to manage up to 128 outputs.
- Each output has user access (triggering) rights controlled from the software.
- Compatible with all the SALTO WRM and CU5000, CU50EN or CU50ENSVN door controllers.
- Current requires 12V/500mA 6VA adaptor included.
- Number of relay each board 8 (Max. of 16 EB5008 board in series, totalling 128 relay outputs).

**Certificates**

- CE EN 55022 (1994), class B.
- CE EN 50082 (1997).

**WRADAPT SALTO wall reader adaptor**

With the SALTO Wall Reader Adaptor, it’s possible to integrate with third party devices such as time and attendance, POS etc. The Wall Reader Adaptor is designed to read data from the RW carriers and send this to an external device. It is connected on one side to any SALTO Wall Reader, and on the other side to the external device. The interface with the external device can be RS232, OMRON and WIEGAND.

**Main features**

- Configuration by dip switches to control data to be read and the interface with the external device.
- Voltage required: From 7 to 15V from the external device. Can also be optionally powered through the jack connector.
- Connection to the reader: UTP CAT5 cable.
- Connection to the external device: 4 pin block terminal.
- Data read by the WRADAPT: ROM CODE, TRACKS ON KEY, WIEGAND CODE.

**CUADAPT SALTO control unit adaptor**

With the SALTO Control Unit Adaptor, it’s possible to integrate with third party devices such as time and attendance systems. The Control Unit Adaptor is designed to allow users to update their cards at the reading point they use on a daily basis, for instance a Time and Attendance terminal. The SALTO wall reader and door controller will update and revalidate the card (see CU50ENSVN for all features) and then send the relevant ID data to the 3rd party device such as a T&A controller.

This means you can now access a door with all the convenience of SALTO and control your staff attendance at the same time. The CU Adaptor is connected on one side to any SALTO door controller, and on the other side to the external device. The interface with the external device can be RS232, OMRON and WIEGAND.

**Main features**

- Configuration by dip switches to control data to be read and the interface with the external device.
- Current required: 12V from control unit.
- Connection to the CU: UTP CAT5 cable.
- Connection to the external device: 4 pin block terminal.
- Data read by the CUADAPT: ROM CODE, TRACKS ON KEY, WIEGAND CODE.
Monitored Linear Power Supply Units

Door controllers are sensitive equipment and must be protected from external events such as power spikes or failures. That's why SALTO has developed a range of Monitored Linear Power Supply units designed to power and protect SALTO door controllers. They enable connection of the door controller to other equipment used in the security, fire, CCTV and access control industries.

The Monitored Linear Power Supply units are equipped with a range of useful features that help you to control and protect the control unit and any external devices.

The Monitored Linear Power Supply units comply with the European standard EN.50131, Part 6, Grade 2, Environmental Class 2.

Main features and benefits

- Equipped with a fuse board with 5 outputs with visual lead indicator to connect up to 4, independently protected, external devices (electric strikes, magnets...).
- Tamper microswitch monitored through the door controller gives warning when the power supply box is opened.
- Door locked by cam lock.
- Connection for battery backup (not included) that permits continued operation if mains AC power goes down.
- Supports rechargeable sealed acid batteries up to 12 Volts 7 Amp / hour.

Functions:

- Battery deep discharge cut off at 10.2 volts to avoid an excessive discharge that could damage the battery.
- High voltage cut off at 15 volts (over voltage protection circuit) to avoid battery overloads and risk of fire.
- On board variable pot for precise voltage setting.

- Current limited battery charge circuit (300mAmp).
- Relay drops out on loss of AC mains input providing a physical warning for other applications.
- Led indicators for:
  - DC output voltage OK.
  - Output voltage fault.
  - Battery fault.
  - AC input OK.

Certificates:

- CE EN 50081-1 (1992)
- CE EN 50082-1 (1992)
- CE EN 60950
- CE EN 61000-6-2
- CE EN 61000-6-3
- CE EN 50131, part 6, Grade 2, Environmental Class2.
**Monitored Linear Power Supply Units**

**PBx12S**
The SALTO Monitored Linear Power Supply units PB112S and PB212S are Monitored Linear Power Supplies designed to work with one SALTO door controller.

- Compatible with CU5000 and CU50ENSVN.
- Dimensions: 225mm x 350mm x 85mm (W x H x D).
- Input voltage: 115VAC 60Hz or 220 – 240VAC 50Hz depending on the model.
- Output voltage: Off load 13.8VDC max – On load 13.58VDC.
- Output current: 2 Amp, including 300mA for battery backup.
- Input protection: 2 Amp ceramic fused safety, fuse block with Earth/Ground connection.
- Output protection: 1Amp fuse block per output.
- Free floating relay 8 Amp switching capacity to take an input for fire alarm control panel and other external devices.

**PB212L**
The SALTO Monitored Linear Power Supply unit PB212L is a Monitored Linear Power Supply designed to work with one SALTO door controller and relay extension board EB5008.

- Compatible with CU5000 and CU50ENSVN.
- Dimensions: 410mm x 310mm x 100mm (W x H x D).
- Input voltage: 220 – 240VAC 50Hz.
- Output voltage: Off load 13.8VDC max – On load 13.58VDC.
- Output current: 2 Amp, Including 300mA for battery backup.
- Input protection: 2 Amp ceramic fused safety, fuse block with Earth/Ground connection.
- Output protection: 1Amp fuse block per output.
- Free floating relay 8 Amp switching capacity to take an input for fire alarm control panel and other external devices.
The SALTO i-Locker electronic locker lock is designed to provide a high level of security protection for lockers and cabinets etc. It features a large twist operated locking turn for ease of use, and the access reader is built into the outside escutcheon. The locking mechanism, electronic components and battery pack are all located on the inside of the door, safe from potential manipulation or vandalism.

A wide choice of ID-carriers for use with the lock is available to suit individual preferences including i-Button and the SALTO RFID technologies (Mifare, Mifare plus, DESfire, DESfire EV1, Vicinity, HID iClass, Legic, Picopass) contained within a choice of card, wristband, key fob or bracelet formats.

The i-Locker lock is perfect for controlling access to lockers, cupboards, display cabinets, boxes and cases where items such as medical drugs, electronic equipment, and museum pieces can be stored and where access control and full audit trailing are required.

Main features and benefits
- Full access control rights programmed via software.
- Virtual network capable.
- Low battery power indication monitored through the SALTO Virtual Network (SVN) as low battery status information is written onto carriers and passed to the software. Also readings can be taken at the lock and passed to the software via PPD connection.
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Audit of 1000 last events.
- Emergency opening through Portable Programming Device (PPD).
- Power source: 3 alkaline batteries - LR03 - AAA 1.5V – Optional 3 Lithium batteries FR03 - AAA 1.5V (see environmental conditions).
- Outside temperature range: -20°C to +70°C; without condensation.
- Inner temperature range: 0°C to +50°C (operating levels of the batteries) -20°C / 70°F with Lithium batteries; without condensation.

Lockers operation modes:
- Fixed locker assignment where a specific ID carrier operates a specific lock.
- Free locker assignment where any ID carrier subsequently used to unlock a locker takes control.
- Family option – Allows for multiple ID Carriers to operate a single locker.

Security Class:
- According EN 60529 for electronic handle sets including reader and lock case.
Main features

- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Visible locked / unlocked indicator.
- Lock with large security deadbolt is built into the i-Locker.
- Ideal for retro fit applications as outside escutcheon rotates for different door handing and styles.
- Battery pack: Sabotage protected on the inside together with decision making electronics. Can only be opened by using special tool.
- Simple off-line installation is possible on many types of small and thin doors.
- Door thickness: Door thickness between 10-30mm. Adaptable on site. For door thicknesses of less than 10mm there are 1mm and 2mm supplements available. For single wall steel doors a fitting preparation is necessary.
- In option with inside thumbturn that always allows opening from the inside for cabins, changing rooms, etc.

i-Locker for lockers and cabinets

The i-Locker lock is perfect for controlling access to lockers, cupboards, display cabinets, boxes and cases where items such as medical drugs, electronic equipment, and museum pieces can be stored and where access control and full audit trailing are required.

model L9090 for changing rooms that require locking from the inside.
The SALTO in room energy saving device (ESD) helps to save up to 65%* of a hotel room or student dorms electricity consumption and unlike standard (magnetic stripe) energy savers, only authorized SALTO key cards will switch on the lights. Any other card (frequent flyer, business card etc) or other SALTO cards belonging to other rooms, will not activate the lights.

It is also available in a connected on-line version, which as well as energy saving indicates in real-time the presence of guests or staff in a room, logging the information directly into the hotel PC. When a guest enters the room and inserts their card into the ESD it switches on all electrical equipment. When staff enter the room for cleaning or maintenance, the ESD recognises their staff card and switches on only the electrical equipment they need to do their work.

* Estimation based on SALTO surveys on energy management.
Technical data

- Input voltage: 220 Volts AC ±15%.
- Consumption: 1 watt in rest mode, 1.5 watts when activated.
- Relay power cut: 2A, 220 Volts.
- Max. section for power and relays contacts connector: Stranded wire section: 12 AWG (2.5mm²). Strip length: 4-5mm.
- Max. section for windows detector connector: Stranded wire section: 16 AWG (0.5mm²). Strip length: 4-5mm.

Main features and benefits

- 2 different finishes for different room styles.
- Available with 1 or 2 relay outputs.
- Window detector input. If window is left open, the system will switch off the air conditioning.
- Flexible exit time delay by software.
- Modern Blue LED indicator which indicates the location of the device in the dark, and blinks as a courtesy indicator after retrieving the card when leaving the room.
- Available in i-Button and RFID (Mifare, DESfire, Vicinity).
- On-line version available in RFID models.

Connected version

- Real-time ESD monitorization through the software.
- Real-time ESD audit trailing. The list of users that have activated the ESD is automatically downloaded into the PC.
- Connected by bus RS485. Last ESD of the series must be connected to a SALTO ON LINE control Unit (CU50EN or CU50ENS/N).
- Max. Number of ESD connected per IP door controller: 40.
Access control management tools

To perform routine tasks such as editing new user keys, set up the access control plan, run diagnostics on off-line devices, perform emergency openings in extreme situations etc SALTO has developed a useful range of tools to make such tasks easier and faster.

SALTO Portable Programming Device PPD
The SALTO Portable Programmer Device is the messenger between the computer and the lock. The SALTO PPD has a multilingual interface.

Main functions
- Initialize doors.
- Collect audit trail.
- Update locks (door profile & internal clock).
- Door diagnostic.
- Emergency opening.
- Firmware update

Technical data
- Power supplied: 3 alkaline batteries - LR03 - AAA 1,5V.
- Connection to lock: cable included.
- Connection to the PC: USB.

SALTO Encoders
The SALTO encoder is a compact device which reads, encodes and updates cards. It is available in different versions depending on the PC connection (USB or Ethernet). It also permits automatic key issuing in large and complex

Technical data
- ID technologies available: i-Button, DESfire, DESfire EV1, Mifare, Mifare plus, Vicinity, Inside Picopass, Legic, HID iClass.
- Current required: 12 v/ 500mA (adaptor included).
- Connection to the PC: USB or Ethernet/Wifi.
- USB encoders do not usually require an external adaptor.
property, enabling users to carry out key assignment simply by having the encoder in a busy area where the user can get their card assigned just by presenting a card to the reader without any assistance required from the access control manager.

**SALTO Desktop Reader**

Created for the Hotel environment, the SALTO desktop reader is designed to read data from the R&W carriers and send it to an external device, usually a Point of Sale terminal.

This can be useful in a PMS environment and works with industry standard protocol.

**Main features**

- Configuration by dip switches to control data to be read and the interface with the external device.
- The interface with the external device can be RS232, OMRON and WIEGAND.
- Current required: 12v DC source (included).
- Connection to the external device: 9 pin D-type female connector (to be connected to serial port).
- Data read by the desktop reader: ROM CODE, TRACKS ON KEY, WIEGAND CODE.
SALTO Pro Access Software has been developed to create a powerful Access Control Management tool. Its features allow you to make the most of your building access control.

Pro Access can manage large numbers of doors and since most access related information is written directly on to the key cards, management of the doors is simply a case of managing the cards. Just by updating the cards you can quickly change most access related authorisations of the users including adding/deleting doors, time zones, calendars etc.

Pro Access can do all this and more. And thanks to its advanced software features, Pro Access is also one of the most user friendly and powerful software products for the access control management of stand alone devices, and IP on-line devices in one converged platform.

User friendly
Structured around users and doors, Pro Access has a user friendly interface that lets you quickly set up your access plan in the shortest possible time.
Both users and doors have their own comprehensive screen configuration to simplify navigation, where you can select from a range of options to set up user or door access rights exactly how you want them.
And to make things even easier, the same screen also displays if any action is needed. This includes doors that need updating, batteries that need replacing, user cards that require updating and so on. All this information is displayed in one window, with all your options available to you at the click of a mouse.

Display what’s happening around your building and take control
Pro Access includes a range of different functions that help you to understand what’s happening inside your building.
It provides live monitoring of on-line control units, on-line wireless escutcheons, roll call functions of user locations and a dynamic audit trail facility. All this is combined with Virtual Network Technology to automatically provide you with all the information you need from the off-line devices to track and control who has access to any door, and when, anywhere in the building.
In addition, the audit trail can also be filtered to remove unwanted information and it can generate customized reports that can then be exported to TXT or excel files for later analysis.
Department operator platform

With SALTO Pro Access department you can manage different sites, each with their own users and doors.

You can manage different departments or multiple global sites, even if they are remotely located, via a Wide Area Network (WAN), using the department structure. Each department operator or local access manager can manage their own site independently, but they can also allow users from other sites or departments to access their doors.

A global management tool for a global world.

Interface your application with SALTO database synchronization

If you already use a large users database software you can keep using it. With SALTO database synchronization you can synchronize them saving time and resources.

SALTO Virtual network capabilities

All SALTO Pro Access RW software includes SVN technology, a module that upgrades this access control software to another security level.

With SALTO Pro Access and SALTO Virtual Network technology, you can add or delete access privileges at will to ID carriers, program in 256 different time zones and much more.

You can carry out updating tasks changing access times/days using up to 256 different calendars; you can validate any change made in the access plan on any SVN on-line wall reader. You can add security through additional authenticated validation procedures including pin codes as well the ability to blacklist cards from the system.

You can benefit from the on card audit-trailing to track staff or visitor movement and receive lock specific battery power data as it’s registered on any card using the lock – staff or visitor – and transferred back to the PC.

It all adds up to a lot of unique advantages that make your maintenance tasks easier and it’s something only SALTO can offer you.

Real-time access control through wireless devices

SALTO Pro Access software enables users to manage and control an entire property simply and easily, as it operates in real-time with SALTO electronic escutcheons.

Its comprehensive range of functions enable you to obtain the best from your access control system. With a just few clicks, the user friendly interface lets you modify the set-up of individual escutcheons, control door status in real-time including who can access which doors and when anywhere in the building and even control the status of individual wireless locks to minimize maintenance issues.

With SALTO Pro Access software you can manage both on-line wireless electronic locks and off-line stand alone devices. And when used with SALTO Virtual Network technology it’s possible to achieve outstanding levels of security as lost or stolen key cards can be immediately eliminated from the system, through both wireless escutcheons and the off-line electronic devices.

Real-time access control with on-line capabilities – even remotely

SALTO Pro Access software allows you to monitor door alarms in real time via on-line IP door controllers.

It uses TCP-IP communication protocols, allowing you to continue using your existing IP network, and can handle large numbers of on-line IP door controllers on the same system. It’s also highly versatile, enabling you to change door access configuration rights with a single mouse click.
Security
Pro Access is highly secure software. Operators are required to log-on via an encrypted password, this log defines their authorization level, and communication between the PC and the on-line devices (IP door controllers and gateways) is also encrypted for additional security protection.

On SQL software versions, users have the option to use Windows™ authentication or SQL authentication to run the database. The database can also be placed in a remote server if required and this server can then be additionally secured by further IT protection.

Finally, SALTO has also developed an advanced algorithm to prevent user card cloning. This is in addition to the standard protection provided by the DESfire credential (i.e. 3DES in case of DESfire).

The Pro Access software automatically uses this algorithm to confirm the authentication of every card, checking that the card is authentic and that it has been legitimately issued to the individual user.

Flexibility
Pro Access is structured around users and doors and has a user friendly interface to help you to correctly set up your access control plan in the shortest time possible.

The system offers a huge number of options including DST time configuration, 256 different time zones, 256 time periods and 256 different calendars, users can be given access levels and/or individual door access, enabling you to customise the software to your exact requirements.

Pro Access also enables users to customise the operator profile that manages the software, structuring tasks and functions for individual operators to carry out. And in addition to this, a really useful feature is its new automatic key issuing function. This enables you to edit the cards of large user groups remotely, removing the need to individually validate each user’s card in person.
Pro Access ROM

Pro Access ROM is ideal for those who need to manage small to medium sized buildings and don’t yet need the capabilities of the full data on card Pro Access system. It is ideal for use with our new XS4 scalable electronic locking system, providing users with complete control of all their electronic locks and key cards from one database in a single easy to use package.

It can be customised to suit your needs enabling you to add users and doors, user groups and zones and set time periods and opening modes that instruct the door to lock or unlock automatically as needed.

And if your access control needs grow, Pro Access ROM can be upgraded at any time to a complete data on card system without having to change any of the door hardware.

Hotel Access Management Software

SALTO has developed HAMS (Hotel Access Management Software) to enable hotels to easily control all their access and guest management needs with one easy to use system.

HAMS is suitable for use in any type of hotel, from those that need to control just a small number of rooms up to the very largest resort based properties that need to control thousands. It offers a huge range of features and tools that make it easy to control all the off-line and on-line guest room and back of house doors in a property from one central location.

It is compatible with most property management software such as Micros Fidelio, New Hotel, Protel, TBC etc and can also be used to manage SALTO Intelligent Energy Saving Devices (ESD’s).

All SALTO HAMS software includes a module that upgrades this access control software to another security level. With the SALTO HAMS software and SALTO Virtual Network technology, you can add or delete access privileges at will to the ID carriers, program in 256 different time zones, etc.

You will be able to carry out updating tasks changing access times/days using up to 256 different calendars; you will have ability to validate any change made in the access plan on any SVN online wall reader.

You will be able to add security through additional authenticated validation procedures including pin codes as well the ability to blacklist cards from the system.

You will benefit from the on card audit-trailing to track staff or visitor movement and receive the lock specific battery power data as it’s registered on any card using the lock – staff or visitor – and transferred back to the PC.

It all adds up to a lot of unique advantages that make your maintenance tasks easier and its something only SALTO can offer you.

Technical features

· Up to 64000 users.
· Up to 64000 doors & i-Lockers.
· Password protected operator’s profiles.
· 256 Calendars.
· 256 Time periods.
· 256 Time zones.
· Available with SALTO database engine or MS-SQL Server data base compatible.
· Connection to online units through TCP-IP protocols using existing LAN & WAN networks and secured through an encrypted protocol.
· Multistation capabilities.

Software versions

· Pro Access 100 and HAMS 100 R&W up to 100 users and 4 on-line doors.
· Pro Access 500 and HAMS 500 R&W up to 500 users and 8 on-line doors.
· Pro Access Excellence and HAMS Excellence R&W up to 64000 users and 16 on-line doors.
· Pro Access Connected and HAMS Connected R&W up to 64000 users and unlimited on-line doors.
· Pro Access Department Operator and HAMS Department Operator up to 64000 users, unlimited on-line doors and department operator management.

Technical requirements

· Ram memory: 64MB (min.), 128MB, (recommended).
· Available Hard Disc space: 50 MB. (Aprox. Depending on the data base).
· MDAC version 2.1 or higher.
· Processor: Pentium II.
· CD drive.
· USB port.
· MS-SQL Server Express, MS-SQL Server 2005 or MS-SQL Server 2008 (for SALTO SQL data base version).
Carriers

SALTO carriers are available in a wide range of versions to suit individual user’s needs. Whatever carrier you choose, all work effortlessly and include Contactless Proximity and i-Button technologies.

All carriers are easy to use, and are SALTO Virtual Network (SVN) compatible.

Key benefits include

- Cards meet ISO Standards.
- Battery free carriers.
- Customable.
- Water proof.
- Ease of use for people with disabilities.
- Ability to use the SALTO Virtual Net (SVN).
- Secure, copyproof data carrier for high security.
- Strong, ergonomic design for long life.
- High resistance to variations in weather conditions.
- Comfortable to use - can be carried on a key ring alongside “traditional keys” (in case of fobs).
- Multiplication capabilities.
i-Buttons

SALTO has combined a unique, ergonomic design with the latest in semiconductor technology, to create an attractive and robust electronic key that can operate and support one of the most versatile access control systems. SALTO offers 2 types of carrier based on i-Button technology, the i-Button itself and i-Button bracelets.

### i-Buttons
- Simple and intuitive use due to the smart design of the i-Button and the electronic lock reader.
- Extremely resistant system suitable for all kinds of environments.
- 512bytes or 2Kbytes i-Button fobs available.
- 5 different colours, black, blue, green, red and yellow.
- Reusable keys.
- SALTO Virtual Network (SVN) compatible.
- i-Buttons can be customized by numeration.
- i-Buttons are water proof.

### i-Buttons bracelets
- Simple and intuitive use due to the smart design of the i-Button and the electronic lock reader.
- Extremely resistant system suitable for all kinds of environments.
- 512bytes or 2Kbytes i-Button bracelets available.
- 5 different colours, black, blue, green, red and yellow.
- Reusable keys.
- SALTO Virtual Network (SVN) compatible.
- i-Buttons can be customized by numeration.
- i-Buttons are water proof.
RFID technology

RFID technology offers no end of interesting features as it's one of the most versatile ID technologies available on the market. Secure, user friendly, customizable, reusable and durable, the RFID carriers are suitable for any kind of use. RFID makes multiapplication with other systems possible by using the same card.

With simple and intuitive use and ID Carriers available in many different formats, this system is ideal for special needs applications.

Contactless cards
- RFID technologies available: DESFire, DESFire EV1, Mifare, Mifare plus, Vicinity, Legic, Picopass, HID iCLASS.
- 13.56MHz contactless RFID identification.
- High security by using encrypted proximity cards*.
- SALTO Virtual Network (SVN) compatible.
- Different memory capacities from 112bytes up to 4Kbytes*.
- Key shape available: ISO 7810 Cards.
- Reusable key cards.
- Multi application with other systems using the same card through shared sectors*.
- Customized card issuing through the SALTO Authorization Media software (SAM)*.
- Water proof cards which can be customized with other options such as Mag stripe, signature panels numeration are also available.
- Available in self programmable sets.

Contactless key fobs
- RFID technologies available: DESFire, Mifare, Legic, HID iCLASS.
- 13.56MHz contactless RFID identification.
- High security, by using password and encrypted Proximity fobs*.
- SALTO Virtual Network (SVN) compatible.
- Different memory capacities from 256bytes up to 4Kbytes*.
- Reusable key fob.
- Multi application with other systems using the same card through shared sectors*.
- Customized fob issuing through the SALTO Authorization Media software (SAM)*.

Contactless watches
- RFID technologies available: Mifare and Legic.
- 13.56MHz contactless RFID identification.
- High security, by using encrypted Proximity watches*.
- SALTO Virtual Network (SVN) compatible.
- Different memory capacities from 256bytes up to 1Kbytes*.
- Reusable key watch.
- Multi application with other systems using the same card through shared sectors*.
- Customized watch issuing through the SALTO Authorization Media software (SAM)*.

NFC phones
- NOKIA 6212 NFC 3G phone Near Field Communication NFC.
- 13.56MHz contactless RFID identification.
- Integrated secure chip with card emulation support for ISO 14443A and Mifare 4K cards.
- Reusable key phone.
- Multi application with other systems using the NFC technology

* Depending on the model and technology.
They are all access control specialists with a wealth of knowledge and experience, dedicated to providing cost effective state-of-the-art solutions to your security requirements.

And as you would expect from the leaders in electronic access control technology, first class technical support is also there when you need it.

Dedicated local support staff are on hand to assist our clients and partners in each region covering Spain, UK, USA, Australia, Canada, Mexico, Holland, Portugal, United Araba Emirates and Malaysia (our technical support centre for the Asia Pacific Region). These teams are complemented by the technical support team at SALTO HQ.

So whether you need assistance with an equipment problem, hardware installation issues, general technical guidance, maintenance contracts or help with updating software via the SALTO Software Update Service, just call us.

Our fully trained staff are here to help.
Since its inception in 2001, SALTO Systems has grown to be the market leader in state-of-the-art electronic access control systems.

Recognising the need for a new access control concept, SALTO has developed a wide range of innovative products such as the SALTO Virtual Network and XS4 access control platform, while our electronic escutcheons, wall readers and on-line and off-line control units now control security access for a growing range of end users from Airports to Hospitals, Banks to Government Buildings and Universities to Hotels.

Our brand new HQ and high capacity manufacturing facility is fully equipped with the latest technology for JIT (Just in Time) manufacturing while substantial ongoing investment in a dedicated RD&I team (Research, Development and Innovation) enables us to stay at the cutting edge of modern mechanical, electronic and software design. This, together with ISO 9001:2008 certification, ensures rigorous quality management systems are in place to ensure the design, development and manufacturing of our electronic access control products always strive to achieve the highest possible standards of quality as required by you, our customers.

Our distribution partner network now covers more than 60 countries to service international growth, and we have branch offices in Spain, UK, USA, Australia, Canada, Mexico, Holland, Portugal, United Arab Emirates and Malaysia with more planned to open in other countries.

At SALTO we are determined to remain the best at what we do - both now and in the future. We never forget you have a choice, and we are committed to providing uncompromising standards of excellence both in our access control products and in our service to you, our customers.

Technology is only useful if it improves people’s lives. Our access control systems aim to do just that. So if you need a better, more efficient way to secure and control your building, take a look at SALTO. Jump!

Corporate

Since its inception in 2001, SALTO Systems has grown to be the market leader in state-of-the-art electronic access control systems.