# //DATASHEET

# SALTO XS4 Escutcheon

networked electronic locking systems:

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 Electronic handle sets need no hard wiring and provide a trully wire-free networked electronic locking solution with a great range of features.

# ANSI ESCUTCHEON Ax6







# NETWORKED ELECTRONIC ESCUTCHEONS XS4 WITH KEYPAD FOR ANSI MORTISE LOCKS

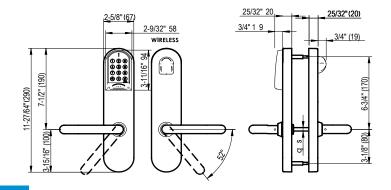
The XS4 electronic lock with keypad is a brand new product that increases security and control as it offers the choice of two forms of authentication to grant access.

You can use your credential, your credential plus PIN (Personal Identification Number) or just your PIN to gain access. It is also available in a wireless version for online real-time control.

# XS4 A60: WIDE BODY VERSION

#### A60 XS4 WIDE BODY VERSION Ax6-K





# **KEYPAD OPTIONS**

**KEYPAD CODE:** The lock itself has an access code used for user authentication.

Every user that goes through that door knows the keypad code. When two users share the same office or room, they are the only ones that know the keypad code of the room. Keypad code can be updated remotely through SALTO Wireless system. Several calendars can be programmed every day, giving the ability to use the passage mode type opening during the day, and dual authentication only at night. Up to 8-digit KEYPAD code.

#### PIN CODE: Personal Identification Number.

Each user has their own personal code. In student dorms, where extra security and dual authentication (both presenting the card and typing in the PIN code) are needed.

Up to 8-digit PIN Code

# MAIN FEAUTURES:

- Fully integrated with the SALTO XS4 platform.
- Virtual network capable through SALTO Virtual Network technology.
- ID technologies available: i-Button, DESFire, DESFire EV1, Mifare, Mifare plus, Mifare Ultralight C, Inside Picopass, LEGIC Prime, LEGIC Advant, HID iClass<sup>©</sup>, SKIDATA.
- 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.
- Compatible with ANSI mortise locks and tubular latches.
- Mechanical override with audit trail facility available.
- Electronic privacy function through thumb turn or button on the inside.

#### MECHANICAL FEATURES:

- Dimensions: 290mm x 67mm x 20mm.
- Weight: 1.5kg.
- Handle turning hangle: 52°.
- Door thickness compatible: 30mm to 115mm.
- Distance from the handle to the cylinder: 61mm, 62mm or 63mm.
- Handle clutch mechanism.
- Inside always allows free egress (anti panic in combination with lock).
- Concealed fixing screws for greater security and improved aesthetics.
- Body and escutcheon made of steel.
- Handle fixed by Steady Fix system (patented).
- Handles compatible: 16mm Ø, 18mm Ø.
- High security through advanced hardened high resistance anti-drill
  plates to protect wires and reader area and additional extreme protection
  through hardened axes and floating steel balls in the handle area.

#### MORTISE LOCK & CYLINDER COMPATIBILITY:

- ANSI Mortice locks.
- Some tubular latches.

#### SQUARED SPINDLES COMPATIBILITY:

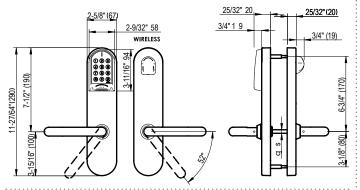
- 7mm, 8mm.
- 7 mm split, 8mm split.



# XS4 A60-K: MODELS AVAILABLE

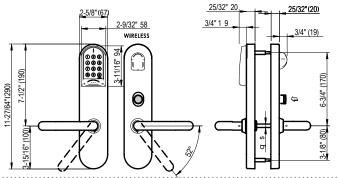
#### MODEL 50-K:

• 2 handles any type.



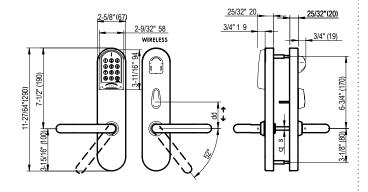
#### MODEL 56-K:

- · 2 handles any type.
- Electronic "do not disturb" system (Not available in selfprogrammable).



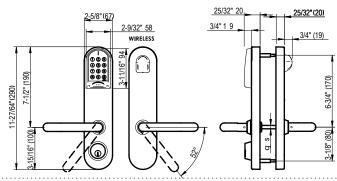
#### MODEL 58 -K:

- 2 handles any type.
- Inside thumbturn.



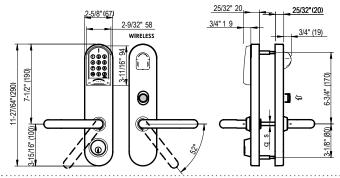
#### MODEL 60-K:

- 2 handles any type.
- Built in mechanical override with audit. (Mortise cylinder 1 1/8").



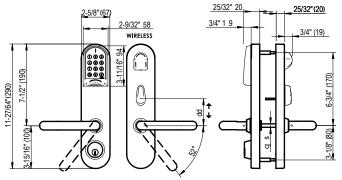
#### MODEL 66-K:

- 2 handles any type.
- Electronic "do not disturb" system (Not available in selfprogrammable).
- Built in mechanical override with audit. (Mortise cylinder 1 1/8").



#### MODEL 68-K:

- 2 handles any type.
- Inside thumbturn.
- Built in mechanical override with audit. (Mortise cylinder 1 1/8").



# **ELECTRONIC MAIN FEATURES AND BENEFITS:**

- Simple offline installation is possible on any type of door, including those with narrow frames.
- Virtual network capable through SALTO Virtual Network technology.
- Wireless real-time online 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, Ultralight C, LEGIC, HID iClass®, Inside Picopass and SKIDATA 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.
- Covers door thicknesses of between 30-115mm.
- The lock can always be opened from the inside (a single action panic feature works in conjunction with the relevant mortise lock).
- 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).

\*depending on the model

# **AVAILABLE LOCK MODES:**

- STANDARD: Locked at all times.
- OFFICE: Free passage ability.
- TIMED OFFICE: Free passage with automatic locking.
- 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.
- TIME TOGGLE: present card to lock, present card to unlock depending on schedules.
- AMOK: Local lockdown of the escutcheon for emergency situations.

# **ACCESS CONTROL FEATURES:**

	SELFROGRAMMABLE	ROM	R&W svn	Wireless System
Maximum number of users per door	1000	1000	4,000,000	4,000,000
Maximum number of doors per system	-	16,000	64,000	64,000
Maximum events on lock audit	-	650	1000	1000
Timezones	-	30	256	256
Timeperiods	-	20	256	256
Calendars in system	-	42	256	256
User groups	-	unlimited	unlimited	unlimited
Zones in System	-	unlimited	unlimited	unlimited
Management software	Programing key & user key sets	Pro Access ROM	Pro Access HAMS (available SQL)	Pro Access HAMS (available SQL)



# SALTO WIRELESS SYSTEM: REAL-TIME ACCESS CONTROL



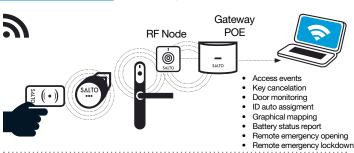
The SALTO XS4 wireless online solution delivers real-time high level security with all the convenience of battery operated access control. The SALTO Wireless system is compatible with most common RFID technologies. This makes integration easy and in most cases users can continue using existing cards for their applications.

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

- Wireless Radio Frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128 bits encryption.
- Stand-alone escutcheons can be upgraded to wireless system.
- · Battery powered.
- Firmware updated via PPD or online real-time wirelessly through Pro Access SQL or HAMS SQL software.
- Completly integrated with SALTO platform. Works offline 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.

#### MAIN FEATURES:

- REAL TIME AUDIT TRAIL: access granted, access denied, card expired.
- REAL TIME DOOR CONTROL: View door status in real-time.
- REAL TIME BATTERY CONTROL: Monitor battery maintenance by viewing the lock battery status in real time.
- KEY MANAGEMENT: Resolved in real time as the locks receive cancelled key updates as soon as they are generated.



#### **GATEWAY**

The SALTO Gateway is the link between the PC and the wireless network, it collects all the information sent by the locks that belong to the gateway.

- Wireless radio frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128bits encryption.
- Connection to the LAN Network 10 BASE-T/100 BASE-TX.
- PoE supported IEEE802.3af (12V power adapter optional)
- Can manage several repeaters and many locks.
- IP addressing through web explorer available.
- Firmware update via software through Ethernet connection.

#### NODE

The SALTO Node is a bridge between the gateway and the wireless network.

- Wireless radio frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128bits encryption.
- · Connection to the GATEWAY BUS 485.
- · Powered by the GATEWAY.
- Can manage several repeaters and many locks.
- Firmware update via software through Ethernet connection.

# **FINISHES:**



# **ID TECHNOLOGIES:**

- MIFARE: Mifare, Mifare plus, Ultralight C, DESfire, Vicinity.
   DESfire EV1 and Vicinity cards.
- LEGIC: Legic Advant, Legic Prime
- HID: HID iClass<sup>©</sup>
- i-BUTTON: ROM RW

- PICOPASS
- SKIDATA
- NFC: SALTO XS4 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.

# RANGE OF RFID CREDENTIAL / KEYS AVAILABLE:



Contactless RFID Key Cards



Contactless RFID Fobs



Contactless RFID Silicone Bracelet



Contactless RFID Fobs Bracelet



#### MIFARE:

# MIFARE DESFire

Mifare RFID contactless technology reads & writes information to contactless smart cards (RFID) compatible with ISO 14.443A, ISO 14.443B and ISO 15.693 standards, and as Mifare, Mifare plus, DESFire, DESFireEV1 technologies. They also allow for updating of the carriers via SALTO Virtual Net (SVN) technology.

- Fully integrated with the SALTO XS4 platform.
- 13.56MHz contactless RFID identification.
- ISO 14.443A, ISO 14.443B and ISO 15.693, Mifare, DESFire Compatible.
- Near Field Communication (NFC) compatible.
- Key card available: 1Kbyte, 4Kbytes and 8 Kbytes depending on technology.
- Key shape available: ISO 7810 Cards, fobs, bracelets, stickers, watches...
- · Reusable key cards.
- SALTO Virtual Network (SVN) compatible\*.
- RFID technology, there's a contactless exchange of information between the card and the reader\*.
- High security encrypted Proximity cards.
- Multiapplication with other systems using the same card with different sectors.
- Customized issuing card through the SALTO Authorization Media software (SAM).
- Waterproof cards which can be customized.
- Upgradable: selfprogrammable, ROM, R&W systems available using the same hardware.

# HID iCLASS®:



HID iCLASS® contactless technology from HID is R&W identification technology based on 13.56 MHz read/write contactless smart card technology. HID iCLASS® offers enhanced security through encryption. This single-card, contactless solution permits multiapplication with others systems, and with the SVN capabilities, you will acquire a lot of interesting new features for your property access control.

- 13.56MHz contact less RFID identification.
- ISO 14.443B2 standard compliant. ISO 15.693 standard compliant.
- Reusable key cards.
- SALTO Virtual Network (SVN) compatible.
- Read & Write technology, there's a contact less exchange of information between the card and the reader.
- High security, by using password and encrypted Proximity cards.
- Multiaplication with other systems using the same card through shared pages.
- Customized issuing card through the SALTO Authorization Media software (SAM).
- Water proof cards which can be customized.
- Upgradable: ROM, R&W systems available using the same hardware.

# PICOPASS:



Picopass is a family of contactless memory chips that support both ISO14443B and ISO 15693 proximity and vicinity protocols. It allows for updating of carriers via SALTO Virtual Net (SVN) technology, is simple to use and offers a range of options including multiapplication with other systems using a Picopass contactless card system.

- 13.56MHz contactless RFID identification.
- ISO 14443B proximity protocols for high speed comunication range of 10 cm. ISO 15693 (Vicinity protocol) to operate at lower speeds over longer ranges.
- SALTO Virtual Network (SVN) compatible.
- High security, by using password and encrypted Proximity cards.
- Multi-application with other systems using the same card through shared pages.
- Customized card issuing through the SALTO Authorization Media software (SAM).

# LEGIC Advant:



LEGIC Ident systems includes highly integrated LEGIC RF Standard and ISO 15693 and ISO 14443 compliant read/write Chip Sets, Security Modules and Transponder Chips for integration into third party products. A very good option if you already use a Legic transponder system.

- 13.56MHz contact less RFID identification.
- Key card available: 2 kbytes.
- Key shape available: ISO 15693, ISO 14443 and LEGIC RF Cards.
- Reusable key cards.
- SALTO Virtual Network (SVN) compatible.
- Read & Write technology, there's a contact less exchange of information between the card and the reader.
- High security, by using password and encrypted 3DES, DES and Legic encryption.
- Multiaplication with other systems using the same card with different segments..
- Customized issuing card memory through the Legic protocol.
- Water proof cards which can be customized.

# SKIDATA:



Flexspace RFID contactless technology from Skidata is R&W identification technology based on ISO 15693 proximity protocol. SALTO's all XS4 E9000 range products already in the field can easily be updated to SKIDATA FLEXSPACE compatibility, serving as building access cards for electronic locks, cylinders and wall readers, as well as a ski pass, providing an enhanced and convenient experience for their guests.

- RFID according to ISO15693, no battery
- SALTO Virtual Network (SVN) compatible.
- 2 permits in Secure FlexSpace +704 bits unsecured FlexSpace; Chip-ID: 01
- Special plastics, waterproof
- Reusable RFID card
- Multi-application with other systems using the same card through shared pages.



# **TECHNICAL DATA:**

#### **CURRENT REQUIRED:**

- 3 alkaline LR6 AA 1,5V. batteries optional FR6 AA1,5V. lithium batteries
- Number of openings:
  - i-Button version: Up to 60,000.
  - Contactless versions: Up to 40.000 depending on the RFID technology.

#### **ENVIRONMENTAL CONDITIONS:**

- -20° / 60°.

#### **CERTIFICATIONS:**

- Declaration of Comity CE

#### Use of radio frequency spectrum

- ETSI EN 302 291-1 V1.1.1 (2005-07)
- ETSI EN 302 291-2 V1.1.1 (2005-07)

# **Electromagnetic Compatibility**

- ETSI EN 301 489-1 (2011-09)
- ETSI EN 301 489-3 (2002-08)

#### Security requirements

- EN 60950-1 (2007)
- Following the provisions of the directive

#### Mechanical certifications against vandalisme & fire

- UL Listed, UL10C fire resistant\*.

# SALTO ACCESS CONTROL PLATFORM FEAUTURES:

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, and 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 with the brand new XS4 online battery operated wireless lock system, you can experience real-time access control solutions without the need for wiring.

- Completly integrated in the SALTO Systems platform.
- Enables users to have standalone electronic cylinders, standalone electronic locks, standalone electronic glass door locks (SALTO wireless compatible), emergency exit devices (SALTO wireless compatible), locker locks and IP based online readers, all in the same system with SALTO Virtual Network capabilities, making it possible to update user card access plans easily.
- Stand-alone escutcheons can be upgraded to wireless system.
- Battery powered.
- Easy to install, to use and to maintain.

\* Depending on the model

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