

## //DATASHEET

### SALTO KS |

The easy wireless cloud-based locking solution

SALTO KS is the new access control platform from SALTO enabling users to control and manage greater range of applications than ever before. Manage locks, people, messages and access rights with no hassle. Immediate access control. From everywhere. Truly wireless.

### SALTO KS IQ

**SALTO \**KS  
Keys as a Service



## SALTO KS

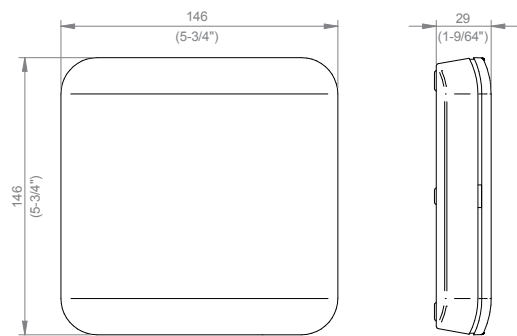
### SALTO KS IQ 2.0

The SALTO KS IQ 2.0 connects your wireless locks to the SALTO KS cloud. Mount the SALTO KS IQ 2.0 with the included mount bracket, plug it into the power outlet and activate it in your SALTO KS account.

The SALTO KS IQ 2.0 permits to connect the electronic locks and cylinder to the cloud directly to the existing internet connection through WIFI or 3G connection in case there's no existing Internet connection.

## SALTO KS: SALTO KS IQ

### Model SALTO KS IQ 2.0



## MAIN FEATURES:

### MAIN FEATURES:

- Fully wireless.
- Connects up to 16 doors per SALTO KS IQ.
- Unlimited SALTO KS IQ's per account.
- Over the Air (OTA) for IQ2 firmware updates.
- PoE version available.
- Ethernet available by default.

### CONNECTION WITH THE STANDALONE LOCKS:

- Wireless radio frequency based on IEEE 802.15.4 at 2,4Ghz.
- Bluetooth 4.2
- AES 128bits encryption.
- Indoor range 10 meters.

### CONNECTION WITH THE CLOUD:

- Plug and play connectivity in +100 countries.
- No data outage risk through best roaming guaranty.
- TLS 1.2. secured communication with the CCC. Communiacion through dedicated APN.
- WIFI 802.11 b/g/n radio
- Connection encrypted through 3DES, AES 128bits WEP WPA.
- AES 128bits encryption.
- Optional 2G, 3G or 4G connectivity if there's no existing Internet connection.
- LED indicator for visual notification.
- USB stick LED for connectivity indicator.

### MECHANICAL ASPECTS:

- Dimensions: 146mm x 146mm x 29mm.
- Weight: 0,4218 kg.
- Easy installation can be fixed on a wall.

### ENVIRONMENTAL CONDITIONS:

- Temperature: 0 - 40°C
- Humidity:

Not suitable to be installed outdoor

### ELECTRONIC ASPECTS:

- Input voltage: 12V
- Max current: 750mA
- Power supply included\*
- PoE enabled\*
  - IEEE 802.3af compliant
  - Max 15.40W also known as 802.3a Type 1.

### POWER CONSUMPTION :

- Ethernet Only: 2.4W<sup>1</sup>
- Ethernet + PoE: 2.9W<sup>1</sup>
- Ethernet + WiFi: 3.61W<sup>1</sup>

Added max power consumption for the M2M module: 2.5W.

So the maximum power consumption for a full variant (non-PoE) is 6.11W.

The maximum power consumption for a full variant supplied by PoE is 6.61W.

### CERTIFICATIONS:

- Declaration of Conformity CE
- Use of radio frequency spectrum
  - Wide Band Data Transmission equipment: EN300328 v2.1.1
  - Electromagnetic Compatibility: EN301489-1 v2.2.0 EN301489-17 v3.2.0
  - Safety, general requirements: IEC60950-1:2005 (Second Edition)+Am1:2009+Am 2:2013

\* available in an specific reference.

<sup>1</sup> Estimations

## SALTO KS IQ OPTIONS

### NETWORK REQUIREMENT (POE/ETHERNET/WIFI) :

- Connection to Port 40000 and Port 40001 needed
  - TCP sockets open to these ports
- Requirements for the update server are:
  - FTP protocol
  - Connection to an FTP server @ iqupdate.my-clay.com
  - Port 21 (TCP) for control
  - Random port (TCP) for data
  - Network unauthenticated (no 802.1X) and with DHCP available.
 If MAB is used in the network (MAC Authentication Bypass), it would be necessary to whitelist MAC addresses of the IQs (which do not support 802.1X) in the network authentication back-end, allowing the IQs to connect without further authentication.
- Bandwidth requirements depend on usage:
  - <10MB/month in normal months.
  - If updates to the IQ need to be done, up to 20MB/update

### WIFI - SPECIFIC REQUIREMENTS:

- IQ2.0 WiFi is only 2.4GHz compliant (not 5 GHz compliant).
- Encryption used between the IQ 2.0 and the Router depends on network configuration. Most commonly it is WPA2, but our IQ will support all common encryption modes (WEP, WPA, WPA2).
- It is necessary for the DHCP server to respond to IP renewal requests.

### POE - SPECIFIC REQUIREMENTS

- PoE: IQ 2.0 is IEEE 802.3af compliant. IQ 2.0 PoE can be connected to:
  - IEEE 802.3af PoE networks
  - IEEE 802.3at PoE networks

### WIFI SETUP VIA BLE

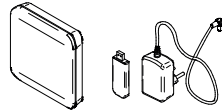
First release of the IQ 2.0 configuration functionality in the KS app will allow to see the available interfaces (ethernet, wifi, m2m), configure the WiFi SSID and passphrase and to set the priority (primary, fallback 1, fallback 2).

By default, Ethernet is the primary interface for all devices, wifi (if available and configured) the first fallback connection and M2M (if available) the second fallback.

## SALTO KS IQ OPTIONS

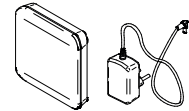
### IQ22W1xxKS - Ethernet together with a USB stick:

- Includes IQ 2.0 ethernet, 2G/3G/4G antenna and 12V power adaptor.



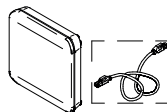
### IQ22W2xxKS - Ethernet and Wifi wireless option:

- Includes IQ 2.0 ethernet - WIFI and 12V power adaptor.



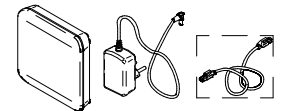
### IQ22W300KS - Ethernet and Wifi wireless PoE:

- Includes IQ 2.0 ethernet - WIFI PoE.
- Ethernet cable not included.

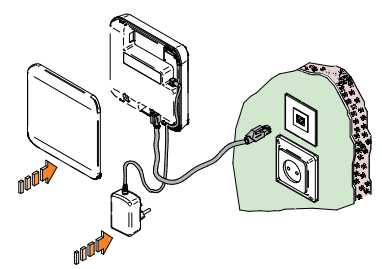
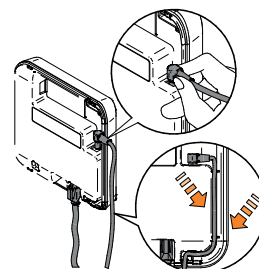
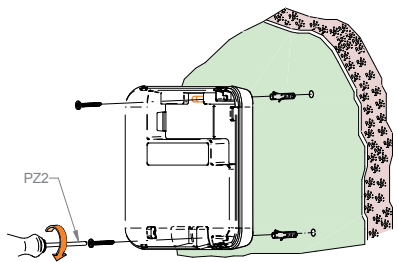


### IQ22W4xxKS - Ethernet:

- Includes IQ 2.0 ethernet and 12V power adaptor.
- Ethernet cable not included.



## SALTO KS IQ INSTALLATION PROCESS



## SALTOKS.COM & SALTO KS APP: FEATURES

No software installation, scaling on any device, secured login, intuitive design, anything you may expect from today's cloud solution is in saltoks.com. Manage locks, people, messages and access rights with no hassle.

**The Dashboard:** saltoks.com always gives you up-to-date information and remote management of all SALTO KS components through the dashboard (door status, last entries, events and so on).

- **Access rights:** saltoks.com gives you the opportunity to individually determine who enters when and where. And if you want to change that just log-in, make your changes and it's done. No updating of SALTO KS Tag or SALTO KS access point required.
- **Telemetry, Messaging and Alerts:** saltoks.com always gives you up-to-date information and remote management of all SALTO KS components through the dashboard.

- **Security:** SALTO KS understands the importance of security. That's why we have incorporated state-of-the-art security measures in all our components and more important, we will keep updating that permanently. Not always visible but always there.
- **Remote opening:** One of the cool but really functional features of SALTO KS is the remote opening of doors with secure OneTimePassword technology. You may not use it every day but when you need it, you will be happy it's there.
- **Any device, any platform:** saltoks.com has been developed supporting all the latest browsers, devices and operating systems. From iOS to Windows and from laptop to Ipad.
- **SALTO KS App:** Available for iOS and Android Phones the SALTO KS App enables you to manage your SALTO KS system when you are on the go.

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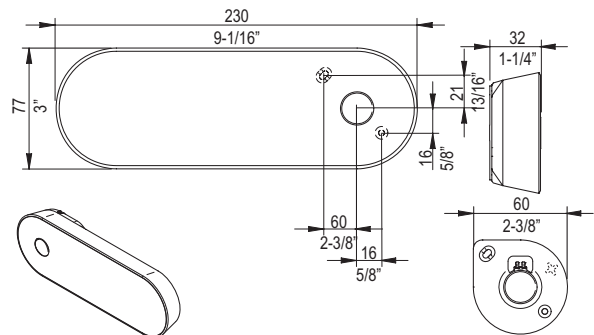
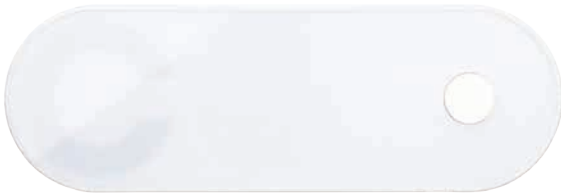
## SALTO KS

### SALTO KS IQ

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## SALTO KS: SALTO KS IQ

### Model SALTO KS IQ 1.0



## MAIN FEATURES:

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- Connects up to 16 doors per SALTO KS IQ.
- Unlimited SALTO KS IQ's per account.
- **Over the Air (OTA) firmware updates.**

### CONNECTION WITH THE STANDALONE LOCKS:

- Wireless radio frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128bits encryption.
- Indoor range 10/15 meters.

### CONNECTION WITH THE CLOUD:

- Plug and play connectivity in +100 countries.
- No data outage risk through best roaming guaranty.
- TLS secured communication.
- AES 128bits encryption.
- GPRS RF CHARACTERISTICS (Worldwide compatible):
  - EGSM-GPRS 900/850 radio.
  - GSM-GPRS 1800/1900 radio.
  - EGPRS 900/850 radio.
  - EGPRS 1800/1900 radio.
  - GSM/GPRS class 10 and EGPRS class 10 capable.

### MECHANICAL ASPECTS:

- Dimensions: 230mm x 77mm x 32mm.
- Weight: 0,67 kg.
- Easy installation can be fixed on a wall.

### ELECTRONIC ASPECTS:

- Input voltage: 12V
- Max current: 800mA
- Power supply included

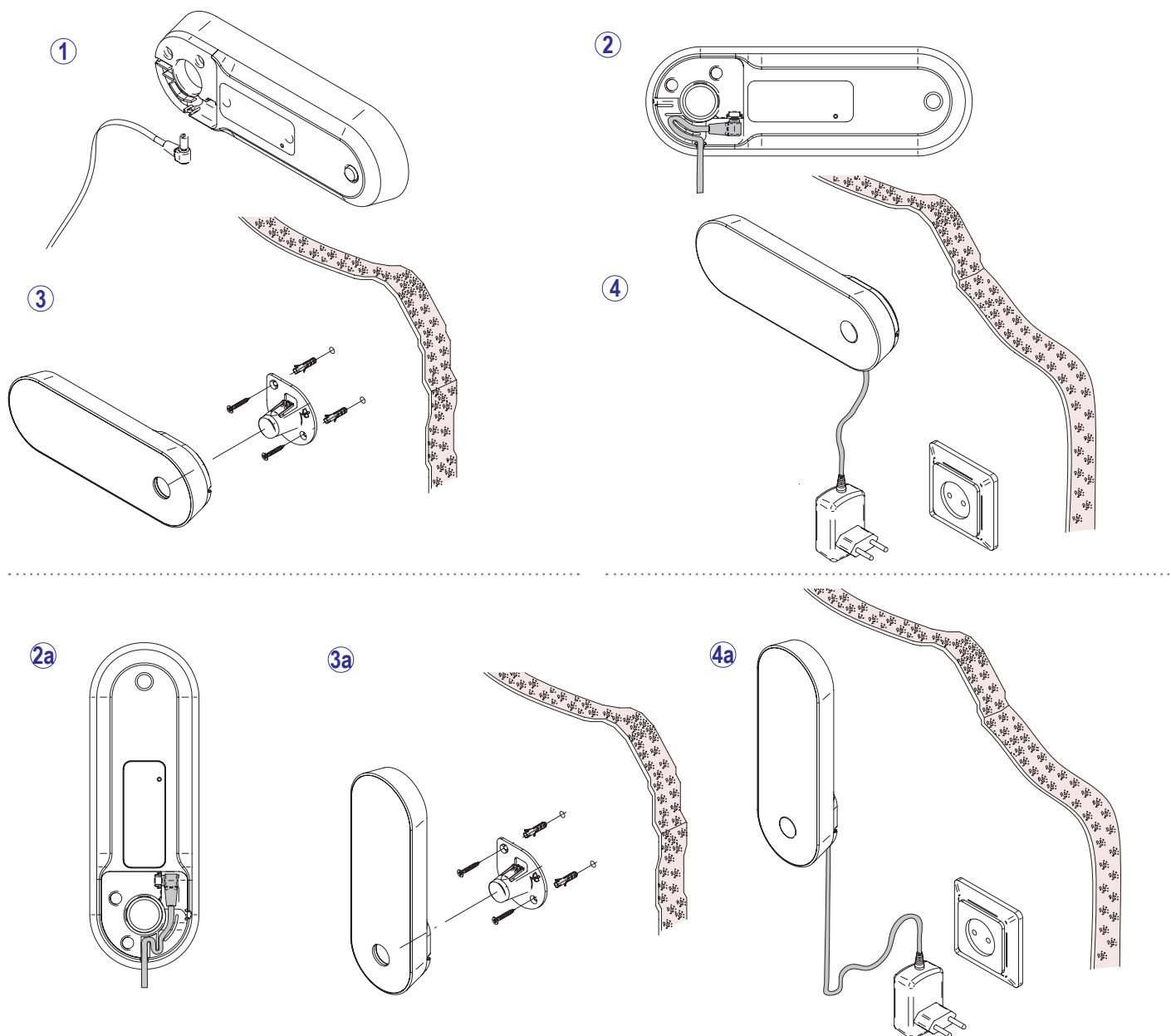
### ENVIRONMENTAL CONDITIONS:

- Temperature: 0 - 40°C
- Humidity:
- Not suitable to be insatllted outdoor

### CERTIFICATIONS:

- Declaration of Conformity 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 vandalism & fire.**

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