

## XSMART

### XS-K - Multi-Technology RFID Keypads

Multi-technology RFID keypads compatible with nearly all access controllers of the market.

They can read 125 KHz and/or 13.56 MHz credentials and communicate with custom Wiegand, OSDP and RS-485 protocols.

Identifiers, communication protocol and firmware updates can be done using our Product Manager software via the micro-USB input on the back of the reader or with a programming card (requires PROX-USB-X).

This option offers full flexibility and scalable functionality. Fobs/Card and readers encryption is possible thanks to the MIFARE® DESFire® technology.



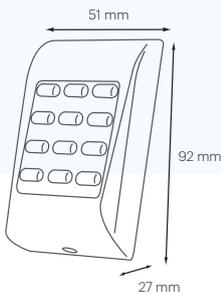
### FEATURES

- Mounting: Surface mount
- Housing: ABS
- Internal buzzer with adjustable intensity using software
- Reading range: Up to 6 cm, depending on the tag type and size
- Operating frequency: 13.56 MHz and 125KHz
- Tamper protection: When opened or dismantled
- Wiring: Terminal block
- Operating voltage: 9 - 15V DC
- Current Consumption: Up to 170 mA (depending of the model, see table 2)
- Models: XS-K-EH-WO, XS-K-MF-WO, XS-K-MF-WO-S, XS-K-EHMF-WO, XS-K-EHMF-WO-X (features per model, see Table 1.)

### ENVIRONMENTAL FEATURES

- Environmental rating: Indoor/ Outdoor IP 65 (resin potted)
- Operating temperature: -30°C to +65°C
- Operating humidity: 5% to 95% RH without condensation

### DIMENSIONS



### COLORS



Black

### BACKLIGHT

Backlight is managed by the host.



Green Backlight  
Access granted



Orange Backlight  
Idle mode



Red Backlight  
Access denied

### CONNECTIVITY



**Micro USB:** For configuration and firmware update

#### Wire terminals

- Power
- RS-485
- Wiegand DO, D1
- Backlight, Buzzer control
- Tamper

### SOFTWARE



The **Product Manager** is user-friendly software for configuring *XPR readers* Multi-Technology readers.

You can select the type(s) of identifier(s), the mode of communication as well as firmware update if necessary.

You can also adjust or remove settings such as the intensity of the LEDs, the sound level of the buzzer and customize the RS-485 communication. The software is available in 7 languages and is compatible with Windows operating systems.



All product specifications are subject to change without notice.



## VARIANTS

Table 1.

References	Functions and credentials			Communication		Firmware Upgrade / Programming	
	125 KHz EM/HID* (EM4100/ HID Prox)	13.56 MHz CSN (ISO 14443-A (MIFARE®), ISO 15693, HID® iClass, NFC®)	Custom Encryption DESFire® EV1, EV2 & EV3	Wiegand 24 to 66 bits (by default 34 bits)	OSDP v2	Micro-USB	Default Credential
XS-K-EH-WO	V	X	X	V	V	V	EM4100
XS-K-MF-WO	X	V	V	V	V	V	Mifare CSN
XS-K-MF-WO-X	X	V	V	V	V	V	Xsecure®
XS-K-EHMF-WO	V	V	V	V	V	V	Mifare CSN
XS-K-EHMF-WO-X	V	V	V	V	V	V	Xsecure®

Table 2.

Information	XS-K-EH-WO	XS-K-MF-WO	XS-K-MF-WO-X	XS-K-EHMF-WO	XS-K-EHMF-WO-X
Max Peak Current [mA] @ 12V	100	170	170	170	170

## ACCESSORIES



### MT-SPACER

Surface mount spacer. With knock-outs on each side and fitting perfectly to the housing backplate, it is the ideal accessories to wire the reader easily if there is not a lot of room for connecting the reader during the installation.



### MC-MINI

This stainless steel cover is not compulsory for external use but recommended if you wish to protect the reader further against harsher weather conditions, UVA and dust. The reader being less exposed if this cover used, it offers also a significant level of vandal resistance if needed.



### PROX-USB-X

RFID desktop reader and enrolment unit that enables easy card enrolment. It reads MIFARE® Cards 13.56MHz (Classic, Ultralight, DESFire®), EM Proximity Cards 125 kHz, HID 125 kHz, AWID 125 kHz and NFC Compatible Cards.



### 13.56 MHz or 125 KHz Fobs & Cards

Fobs and cards available with 1KB and 4 KB memory, and 7 byte or 4 byte identifiers. Different support are available: ISO and NISO cards and ABS key fobs.



### USP

Fitting plate compatible with US surface/ flush mount electrical gang boxes. Also ideal for retrofit to cover pre-or old installation (small wall damages, chips, paint work, etc.) Supplied in the same colour as the readers used for a blending aesthetic design.



## Xsecure®

The Xsecure solution is based on the concept of writing the identifier as **data on pre-coded MIFARE® DESFire® EV3 13.56 MHz cards**.

Xsecure enables each card access key to be **distinct and unique**, produced through **an irreversible diversification process**. As a result, the data on **the card is encrypted and sealed** again, with an error checking against spoofing.

**Only the reader and the production card encoding system are aware of this operation.**

XPR encodes the cards and validates the identifiers issued **to avoid duplication**.