

## ▲ XSMART

### XS - Multi-Technology RFID Readers

Multi-technology RFID readers 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.

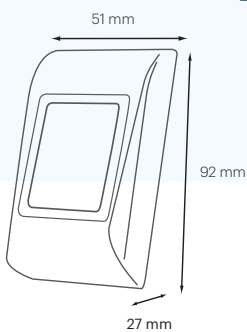
### FEATURES

- 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-EH-WO, XS-MF-WO, XS-MF-WO-S, XS-EHMF-WO, XS-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



### COLOR



Black



### LEDs

LEDs managed by the host controller.



Green LED  
Access granted

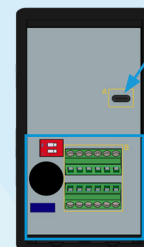


Orange LED  
Idle mode



Red LED  
Access denied

### CONNECTIVITY



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

#### Wire terminals

- Power
- RS-485
- Wiegand D0, D1
- LED, 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*<br>(EM4100/HID Prox) | 13.56 MHz CSN<br>(ISO 14443-A (MIFARE®), ISO 15693, HID® iClass, NFC®) | Custom Encryption<br>DESFire® EV1, EV2 & EV3 | Wiegand<br>24 to 66 bits (by default 34 bits) | OSDP<br>v2 | Micro-USB                      | Default Credential |
| XS-EH-WO     | V                                    | X  | X  | V   | V          | V                              | EM4100             |
| XS-MF-WO     | X                                    | V  | V  | V   | V          | V                              | Mifare CSN         |
| XS-MF-WO-X   | X                                    | V  | V  | V   | V          | V                              | Xsecure®           |
| XS-EHMF-WO   | V                                    | V  | V  | V   | V          | V                              | Mifare CSN         |
| XS-EHMF-WO-X | V                                    | V  | V  | V   | V          | V                              | Xsecure®           |

Table 2.

| Information                 | XS-EH-WO | XS-MF-WO | XS-MF-WO-X | XS-EHMF-WO | XS-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.



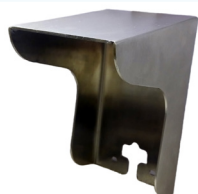
### PROX-USB-X

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**.