

# HIGH-SECURITY FLUSH-MOUNTED READER

RFID CARDS & NFC SMARTPHONES



## BENEFITS

- Secure RFID & NFC identification
- Discreetly and stylishly integrated
- Simplified installation into European electrical boxes
- Backward-compatible and interoperable



- Add your Logo
- Casing colors
- Skin effect personalization

The WAL is a flush-mounted RFID card and NFC smartphone reader, compatible with all access control systems and designed to integrate into all European electrical wall boxes.

The WAL is suitable for high-security access control systems, combining discretion and ease of use.

## SIMPLIFIED INSTALLATION

The compact size of the WAL enables it to be integrated into all European electrical boxes. The detachable terminal block reduces installation time.

## CUTTING-EDGE DESIGN

The WAL's discreet and stylish design gives it an exceptionally high level of stealth to enhance your access points for people. Its ultra-compact, lightweight design ensures that it integrates perfectly into any architectural style.

It is compatible with Legrand™ Mosaic finishing plates and customizable STid covers.

## WELCOME TO HIGH-SECURITY

The WAL reader supports the latest MIFARE® DESFire® EV2 & EV3 contactless chip technology with new data security features:

- **Secure Messaging EV2:** a method for securing transactions, offering protection against interleaving and replay attacks.
- **Proximity Check:** protection against relay attacks.

It makes it possible to use public security algorithms (3DES, AES, RSA, SHA, etc.) recognized by specialized and independent bodies in the information security sector (French cybersecurity agency - ANSSI).

## THE BEST SELF-PROTECTION ON THE MARKET

The patented tear-off detection system based on a movement sensor protects sensitive data by allowing you to erase authentication keys.

Unlike existing systems on the market, the reliability of the accelerometer avoids any circumvention of the system.

## OPEN TECHNOLOGY FOR EASY INTEGRATION

The WAL is compatible with all access control systems and accepts multiple interfaces and protocols (Wiegand, Clock & Data, SSCP® and OSDP™).



## SPECIFICATIONS

Operating frequency/Standards	13.56 MHz: ISO14443A types A and B, ISO18092																																	
Chip compatibility	MIFARE Ultralight® & Ultralight® C, MIFARE® Classic & Classic EV1, MIFARE Plus® & Plus® EV1, MIFARE® DESFire® 256, EV1, EV2 & EV3, SMART MX, CPS3, PicoPass® (CSN only), iCLASS™ (CSN only)* NFC smartphones (HCE)																																	
Functions	Secure CSN read-only (file, sector) / Secure read-write																																	
Communication interfaces & protocols	TTL Data Clock (ISO2) or Wiegand output (encrypted option - S31) / RS485 outputs (encrypted option - S33) and RS232 with secure SSCP and SSCP2 communication protocols; OSDP™ V1 (unencrypted communication) and V2 (SCP secure communications) Compatible with the EasySecure interface																																	
Reading distances**	Up to 6 cm / 2.36" with a MIFARE DESFire® EV2 badge																																	
Light indicator	1 LED with 7 colors (green, red, blue, yellow, purple, turquoise, white) Configurable with RFID card, software or external control (0V), depending on the interface																																	
Audio indicator	Internal buzzer Configurable with RFID card, software or external control (0V), depending on the interface																																	
Power requirement	Typical: 90 mA / 12 VDC - Max: 100 mA / 12 VDC																																	
Power supply	5 VDC to 24 VDC																																	
Connections	8-pin removable terminal block (3.81 mm / 0.12")																																	
Material	ABS/PC - Black or White																																	
Dimensions (h x w x d)	Core: 45 x 45 mm / 1.78" x 1.78" With Mosaic deco plate: 82 x 82 mm / 3.23" x 3.23" - STid: 85 x 85 mm / 3.35" x 3.35"																																	
Operating temperatures	- 20°C to + 70°C / - 4°F to 158°F - Indoor use																																	
Tamper switch	Accelerometer-based tamper detection system with key deletion option (patented solution) and/or message to the controller																																	
Protection	Electronics resistant to water and dust (IEC NF EN 61086 certification)																																	
Mounting	Wall-mounted into electrical boxes - Compatible with European electrical boxes (60 & 62 mm / 2.36" & 2.44")																																	
Certifications	CE, FCC and UL																																	
Part numbers y: casing color (1: black - 2: white)	<table border="0"> <tr> <td>CSN serial number - TTL</td> <td>.....</td> <td>WAL2-R31-E/103-xx/y</td> </tr> <tr> <td>Read only secure - TTL</td> <td>.....</td> <td>WAL2-R31-E/PH5-xx/y</td> </tr> <tr> <td>Read only secure / Secure Plus - TTL</td> <td>.....</td> <td>WAL2-S31-E/PH5-xx/y</td> </tr> <tr> <td>Read only secure - RS232</td> <td>.....</td> <td>WAL2-R32-E/PH5-5AB/y</td> </tr> <tr> <td>Read only secure - RS485</td> <td>.....</td> <td>WAL2-R33-E/PH5-7AB/y</td> </tr> <tr> <td>Read only secure / EasySecure interface - RS485</td> <td>.....</td> <td>WAL2-R33-E/PH5-7AA/y</td> </tr> <tr> <td>Read only secure / Secure Plus - RS485</td> <td>.....</td> <td>WAL2-S33-E/PH5-7AB/y</td> </tr> <tr> <td>Read/write secure SSCP - RS232</td> <td>.....</td> <td>WAL2-W32-E/PH5-5AA/y</td> </tr> <tr> <td>Read/write secure SSCP - RS485</td> <td>.....</td> <td>WAL2-W33-E/PH5-7AA/y</td> </tr> <tr> <td>Read/write secure SSCP2 - RS485</td> <td>.....</td> <td>WAL2-W33-E/PH5-7AD/y</td> </tr> <tr> <td>Read/write secure OSDP™ - RS485</td> <td>.....</td> <td>WAL2-W33-E/PH5-7OS/y</td> </tr> </table>	CSN serial number - TTL	.....	WAL2-R31-E/103-xx/y	Read only secure - TTL	.....	WAL2-R31-E/PH5-xx/y	Read only secure / Secure Plus - TTL	.....	WAL2-S31-E/PH5-xx/y	Read only secure - RS232	.....	WAL2-R32-E/PH5-5AB/y	Read only secure - RS485	.....	WAL2-R33-E/PH5-7AB/y	Read only secure / EasySecure interface - RS485	.....	WAL2-R33-E/PH5-7AA/y	Read only secure / Secure Plus - RS485	.....	WAL2-S33-E/PH5-7AB/y	Read/write secure SSCP - RS232	.....	WAL2-W32-E/PH5-5AA/y	Read/write secure SSCP - RS485	.....	WAL2-W33-E/PH5-7AA/y	Read/write secure SSCP2 - RS485	.....	WAL2-W33-E/PH5-7AD/y	Read/write secure OSDP™ - RS485	.....	WAL2-W33-E/PH5-7OS/y
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## DISCOVER OUR CREDENTIALS AND OUR USER-FRIENDLY MANAGEMENT TOOLS



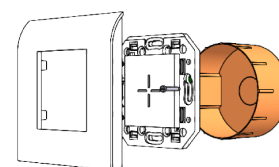
13.56 MHz or dual frequency  
ISO cards & key holders



STid Mobile ID® application  
with NFC smartphones



SECARD  
SECARD configuration kit and SSCP®,  
SSCP2 & OSDP™ protocols



\*Our readers only read the iCLASS™ chip serial number / UID PICO1444-3B. They do not read iCLASS™ cryptographic protection or the HID Global serial number / UID PICO1444-3B.

\*\*Caution: the communication ranges are measured in the center of the antenna and depend on the antenna configuration, the reader installation environment, the temperature, the supply voltage and the read mode (secure or non-secure). External interference may reduce reading ranges.

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