

INSTALLER'S MANUAL



SPECIFICATIONS

Technology: Keypad + RFID (125 KHZ, 13.5 MHz)

Interface: Wiegand, OSDP, WS4, Custom RS-485 (Factory default: Wiegand 34)

Supported credentials: EM4100 or HID Compatible , HID iClass CSN, NTAG, Mifare (Classic, Desfire, Plus, Ultralight), ISO 15693

Card encryption: Desfire EV1, EV2, EV3

Read range: Up to 6 cm

Power supply: 9 - 14 VDC, 150 mA

Sound Indicator: Internal buzzer

LED Indicators: Red, Green and Orange (Red + Green)

Built-in Micro USB connector for protocol selection, configuration and firmware update

Environmental rating: Outdoor, IP65

Operating temperature: -20°C to +50°C

Operating humidity: 5% - 95% relative humidity, non-condensing

Mounting: Surface mount

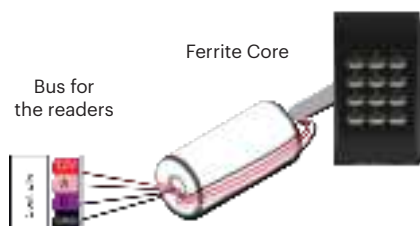
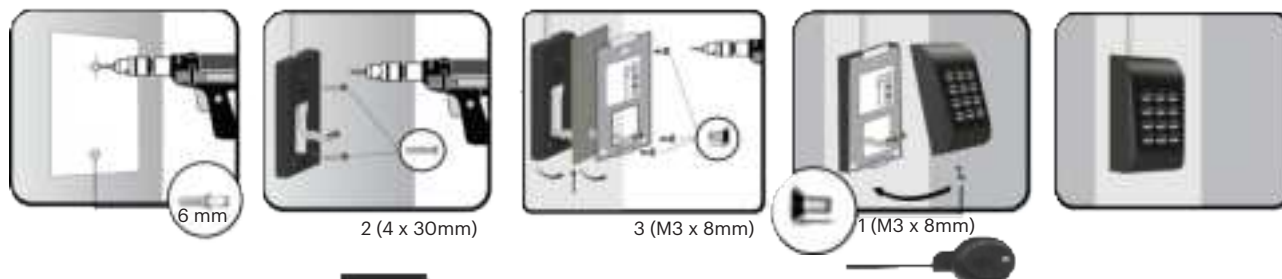
Panel connection: Terminal

Dimensions (mm): 92 x 51 x 27

MOUNTING

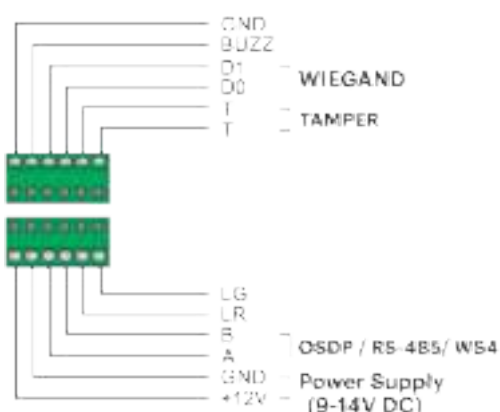


MOUNTING WITH MT-SPACER



Wrap the wires around the ferrite core (1 turn). The ferrite core is provided with the kit and it is used to reduce the EMI.

TERMINAL BLOCKS AND DIPSWITCH



1. OSDP mode: SCBK reset
WS4 mode: Reader address
2. RS-485 120 Ohm termination
ON=0 OFF=1



TERMINALS AND DESCRIPTION

TERMINALS	DESCRIPTION	OSDP CONFIGURATION	WS4 CONFIGURATION	WIEGAND CONFIGURATION	CUSTOM RS-485 CONFIGURATION
A	RS-485 line	RS-485 A (+)	RS-485 A (+)	X	RS-485 A (+)
B	RS-485 line	RS-485 B (-)	RS-485 B (-)	X	RS-485 B (-)
D0	Output	X	X	D0	X
D1	Output	X	X	D1	X
LG	Input	Input 1 (Dry contact to GND only)	X	Green LED input	Green LED input
LR	Input	Input 1 (Dry contact to GND only)	X	Red LED input	Red LED input
BUZZ	Input	X	X	Buzzer input	Buzzer input
+12V	Power Supply	✓	✓	✓	✓
GND	Ground	✓	✓	✓	✓
T	Tamper	X (Tamper state is reported by RS-485)	X (Tamper state is reported by RS-485)	✓	✓
T	Tamper	X	X	✓	✓
DIP SWITCH	DESCRIPTION	OSDP CONFIGURATION	WS4 CONFIGURATION	WIEGAND CONFIGURATION	CUSTOM RS-485 CONFIGURATION
SW 1	Setup	SCBK Reset: Power the reader. Set DIP Switch 1 to ON and in the less than 5 sec set it back to OFF position	The readers for Doors 1.0 and 2.0 must be at address 0 and those for Doors 1.1 and 2.1 at address 1. For doors equipped with 2 readers, one must be at address 0 and the other at address 1.	X	X
SW 2	RS-485 120 OHM termination	✓	✓	X	✓
CABLING	DESCRIPTION	OSDP CONFIGURATION	WS4 CONFIGURATION	WIEGAND CONFIGURATION	CUSTOM RS-485 CONFIGURATION
Max length	Cable Length	1200m	80m	150m	1200m
Cable	Recommended cable type	Multiconductor cable 2 twisted pair with shielding	Multiconductor cable 2 twisted pair with shielding	Untwisted, shielded, 0.22 mm ² min. For longer distance above 20 m use larger diameter.	Multiconductor cable 2 twisted pair with shielding
SIGNALISATION	DESCRIPTION	OSDP CONFIGURATION	WS4 CONFIGURATION	WIEGAND CONFIGURATION	CUSTOM RS-485 CONFIGURATION
Reader ON-Line	Reader is in communication with controller	Managed by Controller	Managed by Controller	Managed by Controller	Managed by Controller
Reader OFF-Line	Reader lost communication with controller	Red LED Blinks	Red LED Blinks fast	X	X

SOFTWARE SETTINGS

XPR Toolbox is software for settings and firmware update of the reader. XPR Toolbox can be downloaded from a <https://software.xprgroup.com/>. To setup the reader or update the firmware, run the XPR Toolbox and select "Generation 2" and "MTPADP-MHWO" and click on "Open" tab. Follow the instruction in the software to set up or update firmware. Connect the reader to PC using Micro USB connector. No additional power for the reader is required. If the reader is used with EWS Controller, reader setting must be done by PROS-CS software.

CARD ENCRYPTION

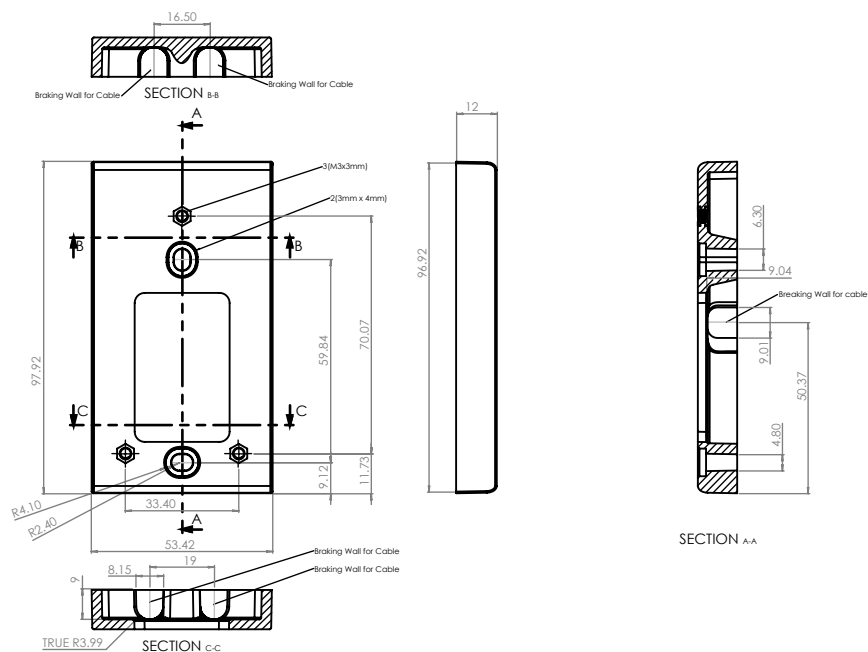
Cards encryption can be used with Mifare Desfire cards. Encryption provide higher level of security where card is accepted by its encrypted content instead of built in card serial number.

For OSDP, Wiegand and Custom RS-485 modes, reader should be programmed with the XPR Toolbox software to use encryption. Cards can be encrypted using application "XPR Card encoder" and desktop reader (PROX-USB). This application is installed together with XPR Toolbox software. When used with WS4 controller, encryption is managed by the WS4 controller.

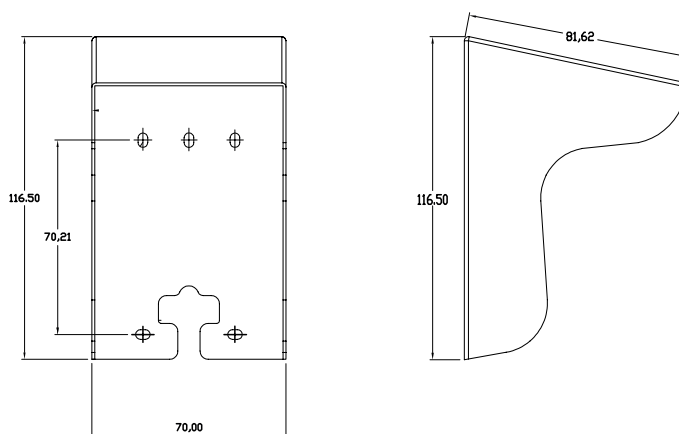
When used with EWS controller, encryption, reader setting and cards are managed by PROS CS software.

ACCESSORIES (Optional)

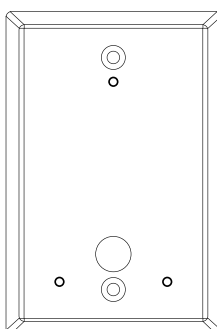
• MT-SPACER



• MC-MINI



• USP



***Important:** These accessories are not included with the reader!

This product herewith complies with requirements of EMC directive 2014/30/EU, Radio Equipment Directive 2014/53/EU. In addition it complies with RoHS2 directive EN50581:2012 and RoHS3 Directive 2015/863/EU.

