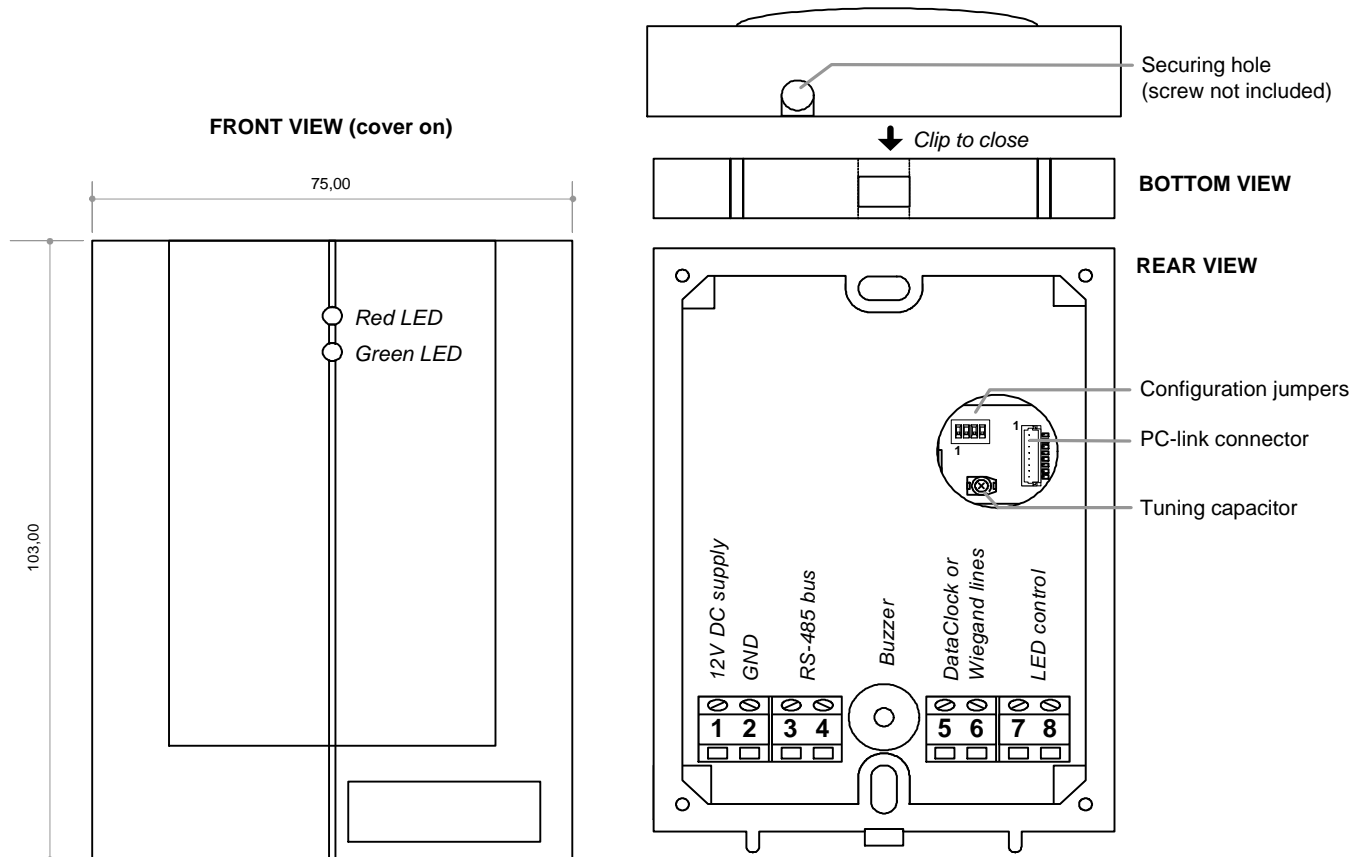# IWM-K632-WD

WALL-MOUNT CONTACTLESS READER (RS-485/WIEGAND/DATACLOCK)

IWM-K632-WD is an highly customizable wall-mount contactless reader. It reads virtually any kind of ISO/IEC 14443 proximity cards, and ISO/IEC 15693 vicinity tags or transponders.

This reader is intended to be used for corporate access control with high level security requirements. It is also suitable for cash or vending machines. 3 output modes are available :
- Wiegand,
- Dataclock (ISO2 / Magstripe),
- RS-485.

Frame length and format for each output mode are fully customizable.

DETAILED VIEWS

FRONT VIEW (cover on)

75,00

103,00

Red LED
Green LED

Securing hole
(screw not included)

↓ *Clip to close*

BOTTOM VIEW

REAR VIEW

Configuration jumpers
PC-link connector
Tuning capacitor

12V DC supply
GND
RS-485 bus
Buzzer
DataClock or Wiegand lines
LED control

1 2 3 4   5 6   7 8

PIN ASSIGNMENT

	RS-485	Wiegand	Dataclock
1	VCC - *12 V DC power supply*		
2	GND - *common*		
3	RS-485 bus A	*Not used*	*Not used*
4	RS-485 bus B	*Not used*	*Not used*
5	*Not used*	Data 0 output	Data output
6	*Not used*	Data 1 output	Clock output
7	*Not used*	Red LED input	
8	*Not used*	Green LED input	

Pins marked as "not used" must be kept unconnected

TECHNICAL DATASHEET

IWM-K632-WD

WALL-MOUNT CONTACTLESS READER (RS-485/WIEGAND/DATACLOCK)

SPECIFICATIONS

ISO compliance	ISO/IEC 14443-A/B 1, 2, 3 & 4 ISO/IEC 15693 1, 2 & 3	**RS-485 mode**	2-wire RS-485 serial bus with optional addressing *Up to 8 readers can be operated on the same bus*
RFID operating frequency	13.56 MHz	Distance to controller : Baud rate[3] :	max 30m 1200, 2400, 4800, 9600, 19200, 38400 or 115200 bps
Card reading distance	5cm typ., min 0cm, max 8cm *depending both on card characteristics and Installation particularities*	Output format[3] : LEDs & buzzer :	Hexadecimal string, 4 to 16 bytes (8 to 32 chars) Driven by short commands on the serial link.
Supported cards[2]	NXP ICODE1 NXP MIFARE Classic & UltraLight NXP DESFIRE, SmartMX, MIFARE ProX Infineon SLE66 STMicroelectronics ST19 … Other cards (Calypso[1], Jewel, SR176…) : on request.	**Wiegand mode** Distance to controller : Output format[3] : Red & green LEDs :	2-wire interface DATA1 & DATA0 active low max 30m Binary, 4 to 16 bytes Driven by the controller (2 input lines, active low)
		Dataclock mode Distance to controller : Output format[3] : Red & green LEDs :	2-wire interface DATA & CLOCK active low max 30m 32 bits BCD (10 digits) or binary, 4 to 16 bytes Driven by the controller (2 input lines, active low)
Buzzer	Single-tone beeper		
Power supply	12 V DC *linear supply recommended*	**Temperature range**	Operation : 0°C → +45°C Storage : -10°C → +55°C
Consumption	average : 80mA (at 12V DC) peak : 250mA (at 12V DC)	**Housing** **Color**	ABC-94HB Black
		Dimensions h x l x d **Weight**	103 x 75 x 23 (mm) 180g
CE mark	EN50082 / EN55022 class B		

[1] Calypso card support is subject to extra license fees

[2] 1 to 4 card accepting templates can be defined through PC-link connector or using master cards

[3] Output format, baud rates and related transmission options are fully configurable through PC-link connector or using master cards

CONFIGURATION JUMPERS

ON

1 2 3 4

	ON	OFF
1	Normal mode	Console mode
2	Red LED input disabled	Red LED input enabled
3	Green LED input disabled	Green LED input enabled
4	Buzzer enabled	Buzzer disabled

[4] Depending on software settings

Use a small and sharp pin to change jumper position. Select "console mode" (jumper 1 OFF) only when configuring the reader through PC-link connector.

Typical configuration :

	1	2	3	4
RS-485 mode		ON	ON	ON
Wiegand mode				ON
Dataclock mode				ON

SOFTWARE SETTINGS

Secured "master cards" can be provided by Pro-Active or generated using **iwmk632cfg** Windows-based software, for an easy configuration of the reader.

Alternatively, use optional INT-USB-232 interface to connect the IWM-K632 reader to a computer through the *PC-Link connector* to edit software configuration.

Please refer to PMAA061 reference manual for details regarding configuration and operating instructions.

INSTALLATION PRECAUTIONS

Reader is shipped un-configured. Appropriate configuration must be applied (configuration jumpers and software settings) before installing the reader.

This device is a contactless reader ; it uses inductive coupling (magnetic field) to power and read the cards. Precaution must be taken to keep the reader free from any source of perturbation (e.g. other readers, lift machines, electrical motors…). Installing the reader on a metal surface (aluminum or steel door frame, iron-armed concrete walls…) may dramatically shorten operating distance and increase power consumption.

The reader must be protected from rain and excessive humidity.

TECHNICAL DATASHEET