PROXIMITY READER TYPE PRT22WM

GENERAL DESCRIPTION

The PRT22WM reader is to be used in conjunction with an access control system which requires Wiegand26® or Clock&Data communication interface and accepts UNIQUE standard cards (EM4001/2) or compatible. The reader is equipped with three LEDs and buzzer with two of the LEDs (RED & GREEN) and the Buzzer which can be externally controlled by separate input lines. The PRT22WM has an optical anti-tamper detection circuit and is prepared for operation in outdoor location.

INSTALLATION

The reader should be mounted using two screws. All electrical connections must be done with power switched off. For better interferences immunity the cable's shield should be connected to earth or minus supply. For best results the reader should be installed on a metal-free surface and away from large metal objects. Although the reader can deliver both Wiegand26® and Clock&Data interfaces, only one of them can be used at a time. This selection is done by wire-jumper, when the jumper is left connected (factory default) the Wiegand26® interface is selected, when cut-off the Clock&Data is active.

Notes:

1. Reading range reduced from 10 to 30% when installed directly on metal surfaces. An optional non-metal spacer between reader and surface will reduce this effect.
2. When reader is powered from 5VDC the special attention must be taken to verify if the supply voltage measured directly on reader terminal is bigger then 4.75VDC.
3. When reader is supplied from another power source then controller both minus terminals (reader's and controller's) must be shorted.
4. We recommend that you ground the power supply to earth ground.
5. The reader should not cause interferences to other equipment, however other devices can interfere with reader.
6. Avoid locating reader close (<0.5m) to another reader or computer monitor.
7. When you observe essential reading range reduction try to relocate unit.

After power up, the reader generates two series of three beeps and light up amber LED. Every time card is read the short beep is generated and amber LED is switched off for a while. Once the card is read, the reader refuses to read card again until card is removed. The auxiliary LEDs and Buzzer can be activated by shorting relevant input lines with GND potential (see cables assignment table).

TAMPER PROTECTION

Reader is equipped with an optical TAMPER detection circuit. When the reader case is closed the infrared beam send from transmitter reflects from bottom of case and the TAMPER line is shorted to GND. When the bottom part of case is slightly detached from upper part the infrared beam doesn't return to receiver and TAMPER line go into high resistance state.

Note: TAMPER output line can sink max. 20mA DC, voltage level connected to output must not exceed 16VDC.

TECHNICAL SPECIFICATION	
Operating Voltage Range	4.75....16VDC (recommended linear type power supply)
Current consumption:	Avg. 40mA
TAMPER output	Transistor type, max. sink 20mA, normally shorted to GND.
Reading range	App. 12 cm for ISO card (manufactured by SOKYMAT)
Card type	UNIQUE, ASK MODULATION 125kHz (EM4001/2 compatible)
Operating temp. range	-20...+60º C.
Cable Distance to Controller	150 meters (500 ft)
Operating Humidity	0 to 95% (non condensing)
Ingress protection code:	IP 56
Dimensions:	100 X 86 X 27
Weight :	160 g

CABLES ASSIGNMENT	
COLOUR	**FUNCTION**
PINK	SUPPLY PLUS
BROWN	SUPPLY MINUS (GND)
GREY	TAMPER output
GREEN	CLOCK or DATA0 output
WHITE	DATA or DATA1 output
RED	BUZZER CONTROL, line is activated by GND potential.
YELLOW	RED LED CONTROL, line is activated by GND potential.
BLUE	GREEN LED CONTROL, line is activated by GND potential.

PRT22WM - Wall mount installation diagram.