MD12C&MD12W

ROSSLARE
SECURITY PRODUCTS

Proximity Reader Modules
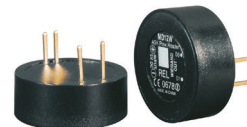User Manual

1. Introduction

The MD12C/W is a series of RFID proximity card reader modules to be installed directly on the controller PCB.

The MD12C/W series reads EM proximity card and transmits its data to the access control system using Clock & Data (MD12C) or Wiegand 26-Bit (MD12W) outputs.

Figure 1: MD12C

Figure 2: MD12W

2. Technical Specifications

2.1 Electrical Characteristics

Power Supply Type	Linear (recommended)
Operating Voltage Range	5 VDC
Absolute Maximum (non-operating)	5.5 VDC
Current @ 5 VDC	Standby: 40 mA Maximum: 55 mA
Maximum Read Range*	5 cm (2 in.)
RF Modulation	ASK, 125 kHz

*   Measured using a Rosslare proximity card or equivalent. Range also depends on electrical environment and proximity to metal
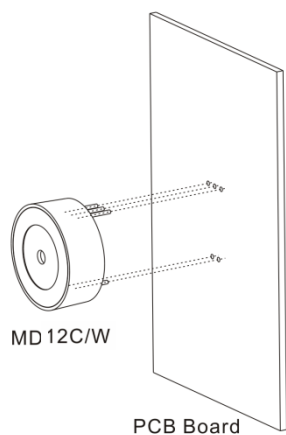
2.2 Environmental Characteristics

Operating Temperature Range	-31°C to 63°C (-25°F to 145°F)
Operating Humidity Range	0 to 95% (non-condensing)

2.3 Physical Characteristics

Weight	5 g (0.2 oz)
Dimensions	2.3cmx0.9cm

3. Installation

MD12C/W

PCB Board

4. Wiring

The reader and the controller PCB are connected with either a 5-pin (MD12C) or a 4-pin (MD12W) conductor header.

The function of each pin is shown in Table 1.

Table 1: Wiring

Pin	Function	
	MD12C	MD12W
1	Vin (+)	Vin (+)
2	Ground (-)	Ground (-)
3	Clock	Data 0
4	Data	N/A
5	Card Presence	Data 1

5. Limited Warranty

The full ROSSLARE Limited Warranty Statement is available in the Quick Links section on the ROSSLARE website at www.rosslaresecurity.com.

Rosslare considers any use of this product as agreement to the Warranty Terms even if you do not review them.

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WARNING

Any Changes expressly or modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference,
and (2) this device must accept any interference received, including interference that may cause undesired operation.

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