

MD12C&MD12W

ROSSLARE
SECURITY PRODUCTS

Proximity Reader Modules

User Manual

1. Introduction

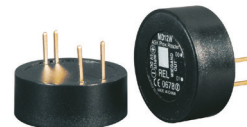
The MD12C/W is a series of RFID proximity card reader modules to be installed directly on the controller PCB.

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

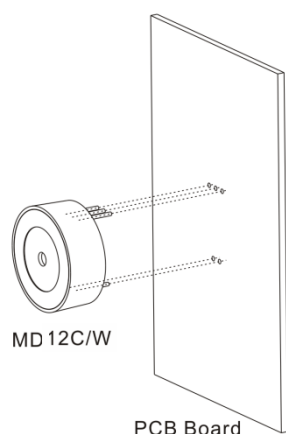
2.2 Environmental Characteristics

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



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.

6. Contact Information

United States and Canada

Rosslare Security Products, Inc.
Southlake, TX, USA
Toll Free: +1-866-632-1101
Local: +1-817-305-0006
Fax: +1-817-305-0069
support.na@rosslaresecurity.com

Europe

Rosslare Israel Ltd.
22 Ha'Melacha St., P.O.B. 11407
Rosh HaAyin, Israel
Tel: +972-3-938-6838
Fax: +972-3-938-6830
support.eu@rosslaresecurity.com

Latin America

Rosslare Latin America
Buenos Aires, Argentina
Tel: +54-11-4001-3104
support.la@rosslaresecurity.com

China

Rosslare Electronics (Shenzhen) Ltd.
Shenzhen, China
Tel: +86-755-8610-6842
Fax: +86-755-8610-6101
support.cn@rosslaresecurity.com

Asia Pacific, Middle East, Africa

Rosslare Enterprises Ltd.
Kowloon Bay, Hong Kong
Tel: +852-2795-5630
Fax: +852-2795-1508
support.apac@rosslaresecurity.com

India

Rosslare Electronics India Pvt Ltd.
Tel/Fax: +91-20-40147830
Mobile: +91-9975768824
sales.in@rosslaresecurity.com

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.



• EN ISO 13485

