

MCRN2 RFID Outdoor Reader

MCRN2 R 2.0
01.10.2024

Key Features

Frequency	13.56 MHz
Interface	RS232/RS485, USB, Wi-Fi
Standards	ISO14443A/B, ISO15693
Supported Cards & Transponders	MIFARE® Family & NTAG I-Code NFC Smartphones
Antenna	Internal
Housing	Waterproof IP67
Power supply	+7V to +60V DC +12V nominal



1 DESCRIPTION

The MCRN2 RFID reader is a versatile and reliable device, designed for applications requiring serial and USB interfaces. It supports baud rates of up to 230k, ensuring fast and efficient communication. The reader operates within a wide voltage range and can be integrated into +12V or +24V systems, making it suitable for various industrial environments. Its robust design and flexible connectivity options make the MCRN2 an ideal choice for both simple and complex RFID systems. The powerful internal antenna can read cards/tags up to 80mm away, and the USB interface can optionally run in Keyboard Emulation mode.

2 ELECTRICAL

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT
VIN	Input Voltage	+7	+12	+60	V
IIN	Input Current (VIN=+12V)	-	100	200	mA
VR	Maximum Reverse Voltage	-	+58	-	V
TA	Ambient Temperature Range	-30	-	+85	°C
RS485-VOD	Differential Output (RL=54Ω)	+1.5	+2	+3.3	V
RS485-A/B	Input Voltages	-8V	-	+13	V
RS485-A/B	Output Voltages	-	+3.3	-	V
RS232 Receiver	Input Voltages	-30	-	+30	V
RS232 Transmitter	Output Voltages	±5	±5.2	-	V
Relays (SSR)	Solid State Relay 1.2A (3A peak) 30V				
ESD Performance					
RS485-A/B	IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)				
RS232	IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)				
MTBF	500.000h				

3 CABLE PINOUT

Cable Pin	RS232 Pinout	RS485 Pinout	Relay Cable
White	GND - Ground	GND	Relay 2
Green	RX Data Input	B	Relay 2
Yellow	TX Data Output	A	Relay 1
Brown	+VIN (+12/24/48 VDC)	+VIN (+12/24/48 VDC)	Relay1

4 ORDERING CODES

ARTICLE NR:	Waterproof	RS232	RS485	Relay	Wi-Fi	Output type
MCRN2-1230S	IP67	1			* opt.	Side
MCRN2-1230R						Rear
MCRN2-1220S	IP67	1		2	* opt.	Side
MCRN2-1220R						Rear
MCRN2-1240S	IP67		1		* opt.	Side
MCRN2-1240R						Rear
MCRN2-1250S	IP67		1	2	* opt.	Side
MCRN2-1250R						Rear

* Wi-Fi interface can be enabled on request by firmware update.
* Standard cable length is 2m. For different lengths, please specify on order.

5 DIMENSIONS

