

MCRN2 RFID/NFC Card Reader

MCRN2 R 1.1
01.02.2022

Key Features

Frequency	13.56 MHz
Interface	RS232/RS485
Standards	ISO14443A/B, ISO15693
Supported Cards & Transponders	MIFARE® Family & NTAG I-Code NFC Smartphones
Antenna	Internal
Housing	Waterproof IP67
Power supply	+8V to +28V DC +12V nominal



1 DESCRIPTION

The MCRN2 is an advanced RFID-Reader supporting multiple ISO standards. The design and interface possibilities could be individually customized and adjusted to the needs in the application.

2 ELECTRICAL

SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT
VIN	Input Voltage	+8	-	+28	V
IIN	Input Current (VIN=+12V)	-	50	200	mA
VR	Maximum Reverse Voltage	-	+60	-	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 PROTECTIVE FEATURES

- Reverse polarity protection
- Overvoltage transient protection
- Thermal shutdown
- Current limiting
- ESD protection
- Short circuit protection

4 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 (+8 to +28 VDC)	+VIN	Relay1

5 ORDERING CODES

RS232 Variant: MCRN2-E232-<RELAY>-<CABLELEN>-<OUTTYPE>

RS485 Variant: MCRN2-E485-<RELAY>-<CABLELEN>-<OUTTYPE>

ARTICLE NR:	Waterproof	RS232	RS485	Relay	Cable len.	Output type
MCRN2-E232-0R-5m-S	IP67	1			5 m	Side
MCRN2-E232-2R-1m-R	IP67	1		2	1 m	Rear
MCRN2-E485-0R-5m-R	IP67		1		5 m	Rear
MCRN2-E485-2R-1m-R	IP67		1	2	1 m	Rear

