



MCRN4 RFID & QR Reader

PoE Ethernet • Wi-Fi • Serial

The **MCRN4** is a robust RFID reader with a clear **OLED display** and a durable aluminium housing. Designed for reliable and secure access control, it is suitable for a wide range of entry points and demanding environments. The OLED display provides easy-to-read status information and user prompts, ensuring intuitive operation and efficient access management. The **MCRN4** is an ideal solution for depots, logistics hubs, industrial facilities, and other locations requiring controlled and dependable access.

Key features

- **Interfaces**
PoE Ethernet, Wi-Fi, RS232 or RS485
- **RFID-Interface**
MIFARE® Family DESFire, NTAG, I-CODE
Optional 125KHz, HID, Legic...
- **Authentication**
Secure element for protected key storage and device authentication
- **Integrated QR Code Scanner**
Reads QR codes directly within the device
- **PoE Enabled Ethernet (IEEE802.3af)**
Delivers power and data over a single connection for easy installation
- **Inputs & Outputs**
Multiple inputs and outputs for external device control

Ideal for

- Clubs & Fitness Studios
- Time and Attendance
- QR Code Check-in
- Access Control
- Event Management
- Parking Management

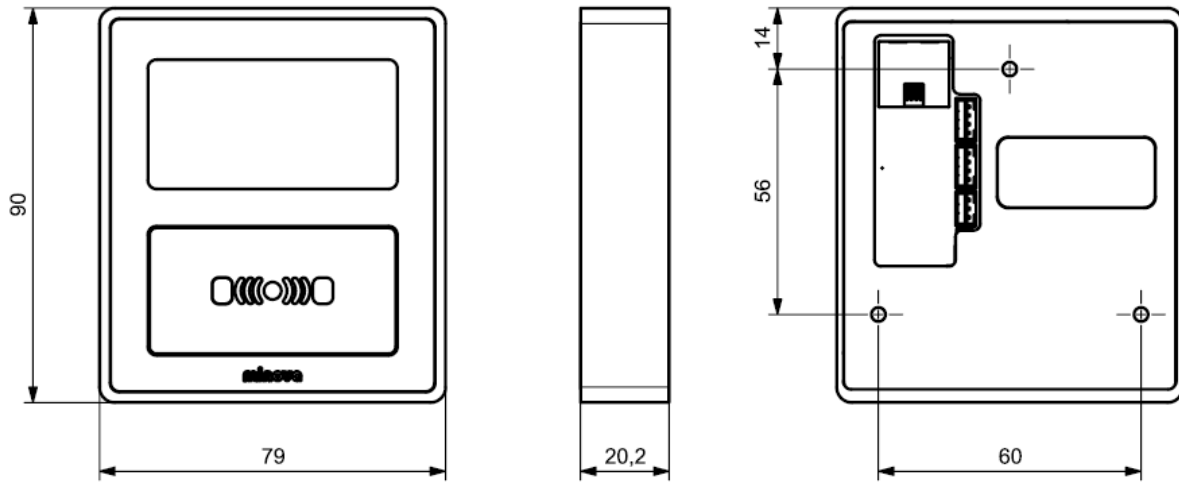


Technical Data

Operating Frequency	13.56 MHz /HF RFID/NFC)	
Dimensions	79X90X20mm	
IP Protection	Indoor use only	
MTBF	500.000h	
Interfaces	Ethernet (PoE-Enabled) Wi-Fi RS232 RS485 2x Solid state relays (1.2V / 30V)	
Supported Cards & Transponders	MIFARE® Classic MIFARE® Ultralight MIFARE® DESFire NTAG I-Code NFC Phones	
Antenna	Integrated	
Display	OLED 128x64 Pixels	
Temperature	-40°C to +85 °C	
Relative Air Humidity	5% up to 95% (non-condensing)	
Power Supply	+12VDC or PoE	
Current Consumption	~200 mA at +12V	
Weight	Plastic Encl. Aluminum Encl.	90g 150g
Supported Standards	ISO14443A/B ISO15693	
Certifications	Europe/UK	CE/RED
Compliances	Cyber Security	EN 18031-1
	EMC	EN 301489 EN 55022 EN 300330 RED 2014/53/EU
	Environment	RoHS Compliance REACH 1907/2006
Device Photos		

Dimensions & Ports

The following views illustrate the precise dimensions and physical layout of the **MCRN4 RFID & QR Reader** designed for seamless integration into various environments. All measurements are in millimeters. The housing is optimized for wall mounting and device integration, following standard industrial dimensions.



Interface Ports

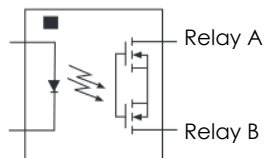
Pin	RS232/RS485 Port	Output Port	Input Port
1	GND	Relay 1A	Input 1
2	RXD Serial Input or B	Relay 1B	Input 2
3	TXD Serial Output or A	Relay 2A	GND
4	VIN (+12VDC) Input	Relay 2B	

Input Voltage Range	Value
Minimum	+7 VDC
Nominal	+12 VDC
Maximum	+58VDC



Output ports

The relays are single pole, normally open solid-state type



Parameter	Rating	Units
Blocking Voltage	30	V _P
Load Current	1.2	A _{DC}
On-Resistance (max)	0.25	Ω



Input ports (active low)

Each input pin consists of a transistor input stage with an integrated pull-up resistor, suitable for push buttons or input switches activated by a low signal or by pulling the pin to ground.

OPERATION

- Input HIGH (open): Pull-up resistor keeps the pin at logic HIGH.
- Input LOW (switch closed / connected to GND): Transistor turns ON and pulls the pin to GND.

EXAMPLES

Push Button (active low)

INPUT PIN



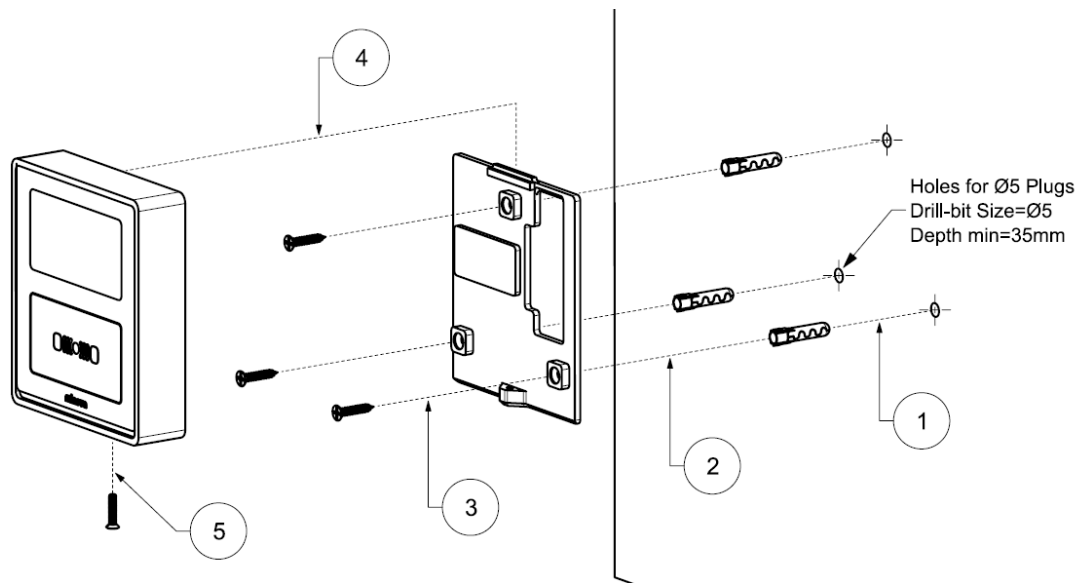
Switch (active low)

INPUT PIN



Installation Guide

This picture explains how to install the reader on a wall.



- 1- Mark and drill three holes in the wall. Use a Ø5 mm drill bit and drill each hole to a depth of at least 35 mm.
- 2- Insert the three wall plugs into the drilled holes.
- 3- Secure the mounting plate to the wall using the three screws. Make sure the plate is upright and firmly attached.
- 4- Fit the device onto the mounting plate by hooking the top onto the plate first, then pressing the bottom into place.
- 5- Tighten the retaining screw at the bottom of the device to lock it onto the mounting plate.

Ordering Codes

Article Nr.	Ethernet	Wi-Fi	Relays	Inputs	Serial	QR Scanner	Enclosure
MCRN4-1100	PoE	✓	✓	✓	RS485*		Aluminum
MCRN4-1200	PoE	✓	✓	✓	RS485*	✓	Aluminum
MCRN4-1101	PoE	✓	✓	✓	RS485*		Plastic
MCRN4-1201	PoE	✓	✓	✓	RS485*	✓	Plastic

* Optional RS232

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