MCRN4 Outdoor Reader

PoE Ethernet • Wi-Fi • Serial



The ***MCRN4*** is a robust RFID reader with a clear ***OLED display*** and a durable outdoor 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

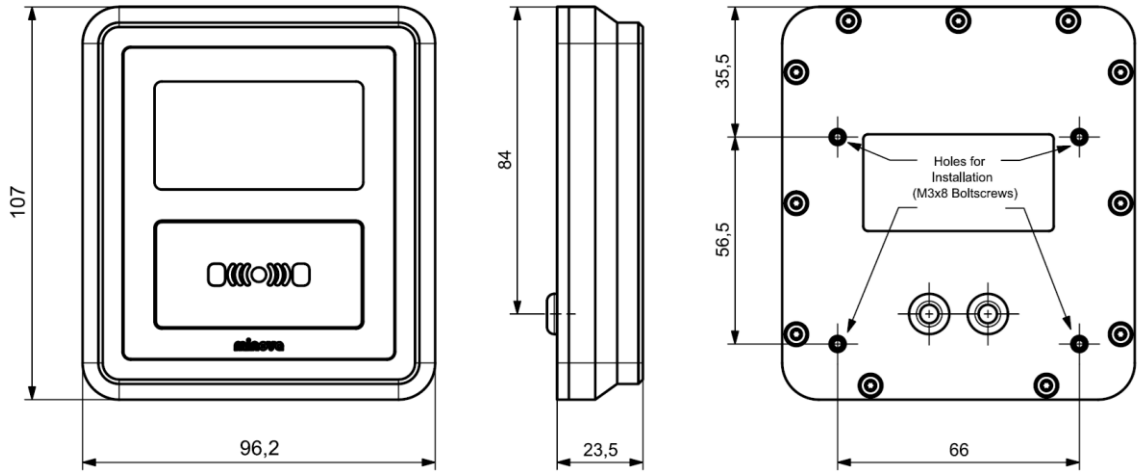
Access Systems · Logistik Supply chain · EV-Charger · Industrial Automation · Time Tracing · Healthcare · Shop PoS · Public Transport · Parking · ATM · Library · Home Automation · Telemetry Systems

Technical Data

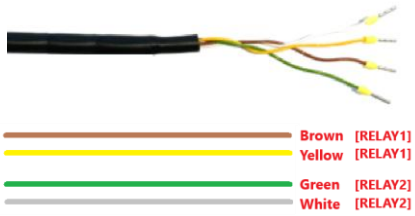
Operating Frequency	13.56 MHz /HF RFID/NFC)	
Dimensions	96.2X107X23.5mm	
IP Protection	IP65	
MTBF	500.000h	
Interfaces	Ethernet (PoE-Enabled) Wi-Fi RS232 RS485 2x Solid state relays (2A / 30V)	
Supported Cards & Transponders	MIFARE® Classic MIFARE® Ultralight MIFARE® DESFire NTAG I-Code NFC Phones	
Antenna	Integrated	
Display	OLED 128x64 Pixels	
Temperature	-20°C to +70 °C	
Relative Air Humidity	5% up to 95% (non-condensing)	
Power Supply	+12VDC or PoE	
Current Consumption	~200 mA at +12V	
Weight	200 gr	
Supported Standards	ISO14443A/B ISO15693	
Certifications	Europe/UK	CE/RED
Compliances	Cyber Security EMC Environment	EN 18031-1 EN 301489 EN 55022 EN 300330 RED 2014/53/EU RoHS Compliance REACH 1907/2006
Device Photos		

Dimensions & Ports

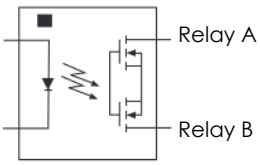
The following views illustrate the precise dimensions and physical layout of the **MCRN4 RFID & QR Reader** designed for seamless integration into various environments. All measurements are in millimeters. The housing is optimized for wall mounting and device integration, following standard industrial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



Interface Ports

Cable	Type	RS485 Port
1	Ethernet 1.5m	
2	Relays 1.5m 4-wire cable	
3	Relays + Inputs 1.5m 8-wire cable	
4	Optional other interfaces	Inputs, RS232 or RS485

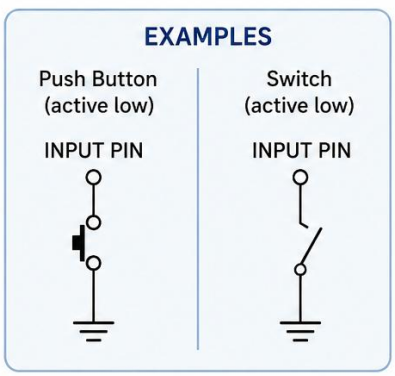
Output ports
The relays are single pole, normally open solid-state type



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.

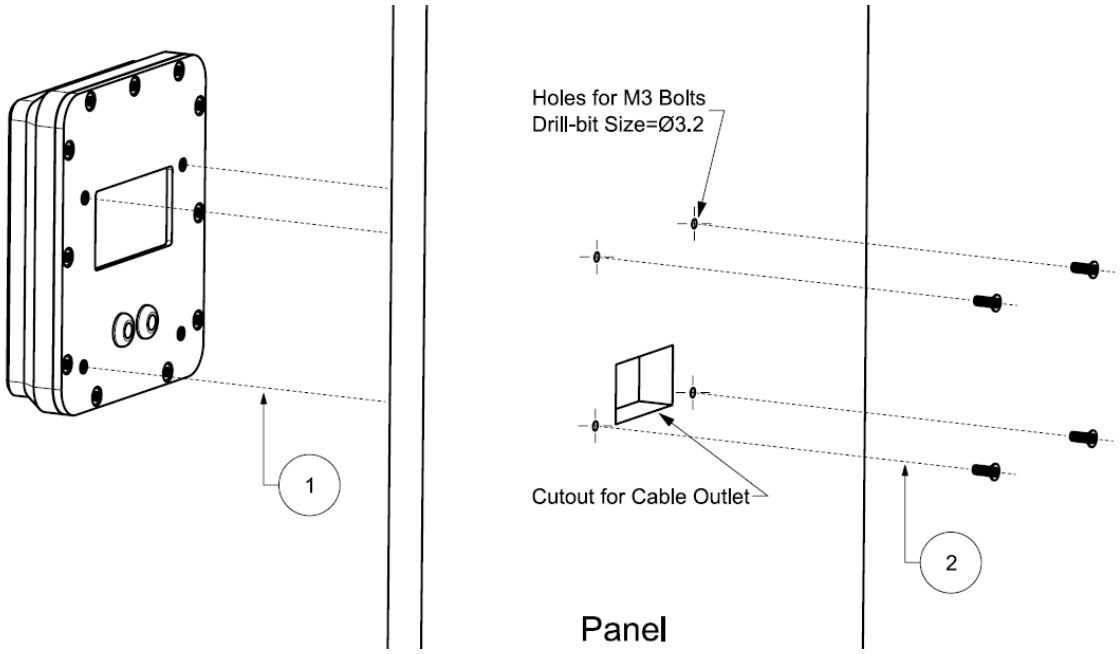
OPERATION
- Input HIGH (open): Pull-up resistor keeps the pin at logic HIGH.
- Input LOW (switch closed / connected to GND): Transistor turns ON and pulls the pin to GND.



Installation Guide

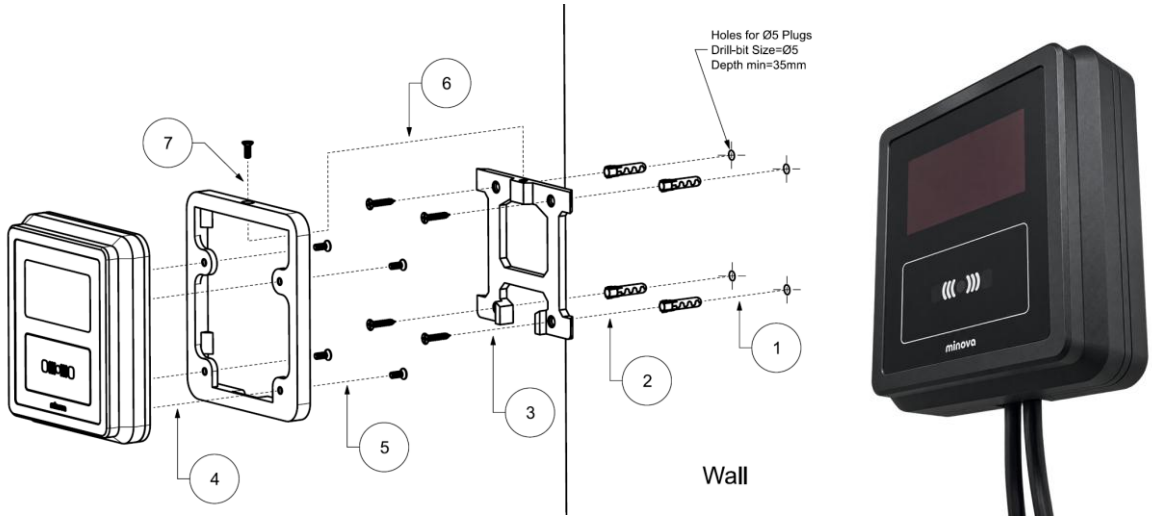
These pictures explain how to install the reader on a wall or panel.

Panel Mount



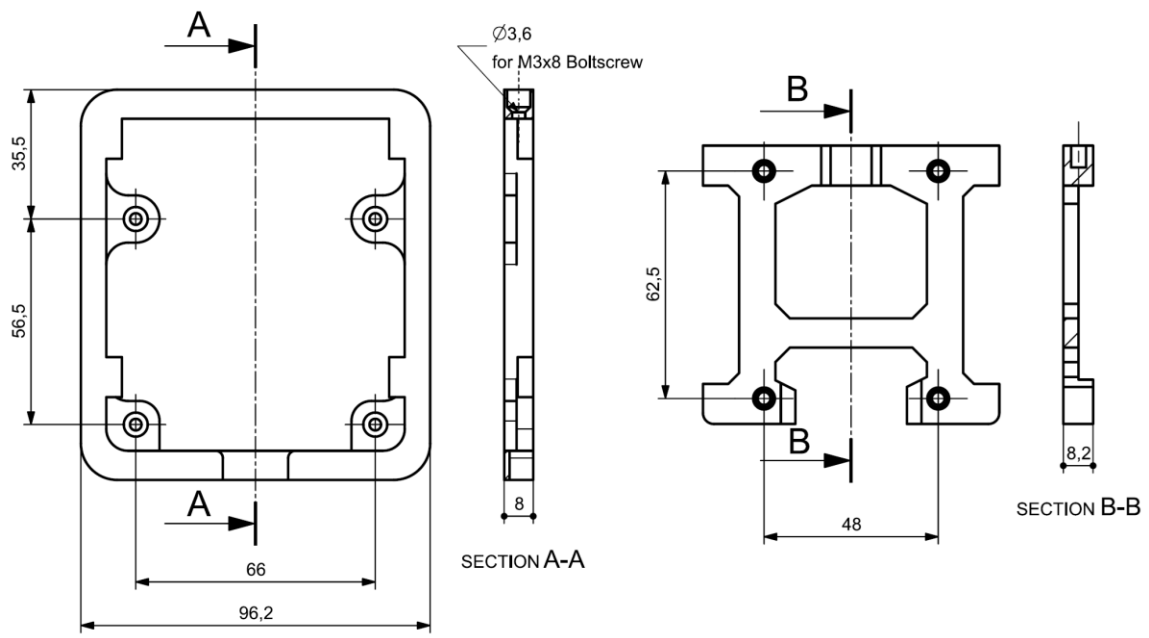
1. Drill four Ø3.2 mm mounting holes and make the cable opening.
2. Feed the cables through and align the reader's rear M3 inserts with the holes.
3. Secure from behind the panel using four M3 screws of suitable length.

Surface Mount Kit



1. Use the mounting plate (3) to mark the four drilling points on the wall.
2. Drill four Ø5 mm holes to a minimum depth of 35 mm.
3. Insert the wall plugs (2) into the drilled holes.
4. Position the mounting plate (3) and secure it with screws (1).
5. Fix the mounting frame (4) to the reader using screws (5).
6. Attach the reader (7) to the mounting plate and secure it with the retaining screw (6).

Surface Mount Kit Dimensions



Ordering Codes

Article Nr.	Ethernet	Wi-Fi	Relays	Inputs	Serial	QR-Code Scanner
MCRN4-2100	PoE	✓	✓	*	*	
MCRN4-2200	PoE	✓	✓	*	*	✓
MCRN4-2201		✓	✓	*	RS485	✓
MCRN4-WMO	Surface Mount Kit					

* Optional

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