

MCRN2P RFID-Reader with OLED Display

 MCRN2P R 1.4
 April. 01, 2025

Key Features

| | |
|--------------------------------|--|
| Frequency | 13.56 MHz |
| Interface | Ethernet (PoE-Enabled) RS485/RS232 |
| Standards | ISO14443A/B, ISO15693 |
| Supported Cards & Transponders | MIFARE® Family & NTAG I-Code NFC Smartphones |
| Antenna | Internal |
| Display | OLED 128x64 |
| Housing | Waterproof IP65 |
| Power supply | +12V or PoE |
| Dimensions | 100x100x25mm |



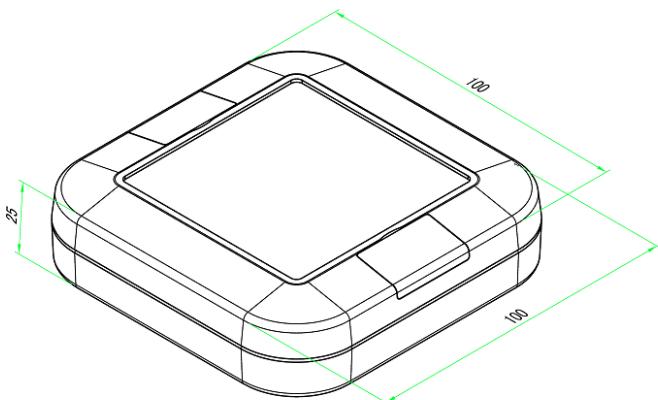
1 DESCRIPTION

The MCRN2P is a robust outdoor RFID reader equipped with an OLED display, designed for secure access control in various environments. Ideal for a wide range of access points, it ensures reliable and efficient management of authorized entries. With its durable build, it's suited for all-weather conditions, making it a dependable choice for high-security areas. The OLED display provides clear instructions, enhancing user experience and operational efficiency. Perfect for locations requiring stringent access management, such as depots or logistics hubs.

2 ELECTRICAL

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNIT |
|--------------------------|---|------|------|------|------|
| VIN | Input Voltage | +8 | - | +60 | V |
| IIN | Input Current (VIN=+12V) | - | 100 | 200 | mA |
| VR | Maximum Reverse Voltage | - | +60 | - | V |
| TA | Ambient Temperature Range | -40 | - | +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) | 2x Solid State Relays 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 DIMENSIONS & MOUNTING



100 x 100 x 25 mm



Blind lids for wall mounting

4 VARIANTS

| Rear Output | | Side Output | Open Outputs | | | | | | | | |
|---|--------------|--|---|-------|----------|--------|--------------|-------|-------------|-------|----------|
| Ethernet Only | | Ethernet Only | Ethernet + Relays + Inputs+ RS232/485 | | | | | | | | |
|   | |   |  | | | | | | | | |
| Ethernet + Relay Cable | | Ethernet + Relay Cable | | | | | | | | | |
|   | |   |  | | | | | | | | |
| Relay Cable Pinning | | | | | | | | | | | |
|  <table> <tr> <td>Brown</td> <td>[RELAY1]</td> </tr> <tr> <td>Yellow</td> <td>[RELAY1]</td> </tr> <tr> <td>Green</td> <td>[RELAY2]</td> </tr> <tr> <td>White</td> <td>[RELAY2]</td> </tr> </table> | | | | Brown | [RELAY1] | Yellow | [RELAY1] | Green | [RELAY2] | White | [RELAY2] |
| Brown | [RELAY1] | | | | | | | | | | |
| Yellow | [RELAY1] | | | | | | | | | | |
| Green | [RELAY2] | | | | | | | | | | |
| White | [RELAY2] | | | | | | | | | | |
| RS232/RS485 Cable Pinning | | | | | | | | | | | |
|  <table> <tr> <td>Brown</td> <td>[+VIN]</td> </tr> <tr> <td>Yellow</td> <td>[TX-OUT] [A]</td> </tr> <tr> <td>Green</td> <td>[RX-IN] [B]</td> </tr> <tr> <td>White</td> <td>[GND]</td> </tr> </table> | | | | Brown | [+VIN] | Yellow | [TX-OUT] [A] | Green | [RX-IN] [B] | White | [GND] |
| Brown | [+VIN] | | | | | | | | | | |
| Yellow | [TX-OUT] [A] | | | | | | | | | | |
| Green | [RX-IN] [B] | | | | | | | | | | |
| White | [GND] | | | | | | | | | | |

5 ORDERING CODES

| ARTICLE NR: | Interface | Relays | Inputs | RS232 | RS485 | Waterproof | Power Supply | Output Type |
|---------------------|-------------|--------|--------|-------|-------|------------|--------------|--------------|
| MCRN2P-1200 | PoE | 2 | 2 | 1 | 1 | | PoE or Vin | Open outputs |
| MCRN2P-120V | Passive-PoE | 2 | 2 | 1 | 1 | | +12VDC | Open outputs |
| MCRN2P-1100R | PoE | | | | | IP65 | PoE | Rear Output |
| MCRN2P-1100S | PoE | | | | | IP65 | PoE | Side Output |
| MCRN2P-1101 | RS485 | | | | 1 | IP65 | +12VDC | Side Output |
| MCRN2P-1102 | RS232 | | | 1 | | IP65 | +12VDC | Side Output |
| MCRN2P-1150R | PoE | 2 | | | | IP65 | PoE | Rear Output |
| MCRN2P-1150S | PoE | 2 | | | | IP65 | PoE | Side Output |

Article Number

MCRN2P-1XXX_

R: Rear cable outputs
 S: Side cable outputs



6 FCC Regulatory Conformance

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated at a minimum distance of 20cm between the radiator and your body.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Part 15.19 Warning Statement- (Required for all Part 15 devices)

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.

FCC Part 15.21 Warning Statement-

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.