

MCR08N RFID/NFC Touch Terminal

MCR08N R 1.1
Jan. 20, 2022

Key Features

| | |
|---|----------------------------------|
| Frequency | 13.56 MHz |
| Interface | Ethernet (GSM), RS232/485 |
| Standards | ISO14443A/B, ISO15693 |
| Supported Cards & Transponders | MIFARE® Family NTAG I-Code |
| Antenna | Internal |
| Relay | 2x1.5A/24V |
| Power supply | +8V to +36V DC |



1 DESCRIPTION

The MCR08N is a state-of-the-art ethernet reader with a touch display, supporting multiple standards and interfaces.

2 ELECTRICAL

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNIT |
|------------------------|------------------------------|---|------|-------|------|
| VIN | Input Voltage Vin | +8 | +12 | +36 | V |
| IIN | Input Current (VIN=+12V) | - | 250 | 500 | mA |
| VR | Maximum Reverse Voltage | - | 40 | - | V |
| TA | Ambient Temperature Range | -30 | - | +85 | °C |
| VTVS | TVS Clamping Voltage | +40.9 | - | +45.2 | V |
| IPEAK | TVS Peak Pulse Current | - | - | 25.6 | A |
| PDISS | TVS Power Dissipation | - | - | 1500 | W |
| INPUTVMAX | Max. voltage of input pins | -6 | - | +40 | V |
| 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 |
| RELAY | Max. 1.5A / 24VDC | | | | |
| 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 | | | |

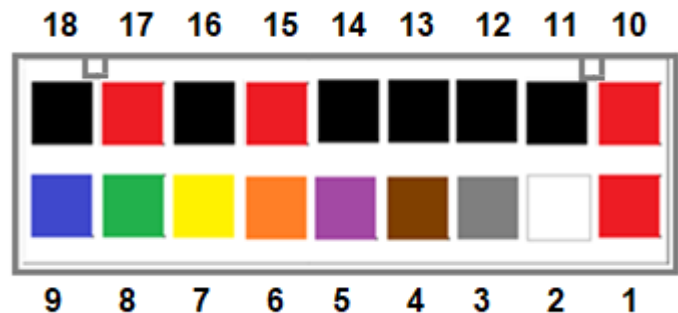
* At least a 2A power supply is recommended for proper relay switching and GSM connectivity

3 PROTECTIVE FEATURES

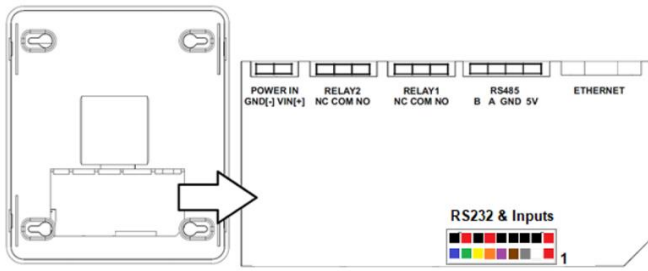
- Reverse polarity protection
- Overvoltage transient protection
- Thermal shutdown
- Current limiting
- ESD protection
- Short circuit protection

4 INTERFACE CONNECTOR PINOUT

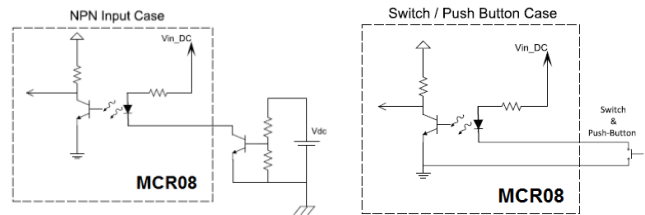
| Main Connector | |
|----------------|---|
| 1 | +5V Output (optional voltage ref. for inputs) |
| 2 | EXT_IN0 |
| 3 | EXT_IN1 |
| 4 | EXT_IN2 |
| 5 | EXT_IN3 |
| 6 | COM1-RXD (RS232) |
| 7 | COM1-TXD (RS232) |
| 8 | COM2-RXD (empty in GSM version) |
| 9 | COM2-TXD (empty in GSM version) |
| 10 | +5V Output |
| 11 | GND |
| 12 | GND |
| 13 | GND |
| 14 | GND |
| 15 | +5V Output |
| 16 | GND |
| 17 | +5V Output |
| 18 | GND |



5 PORTS



6 INPUT CIRCUITS



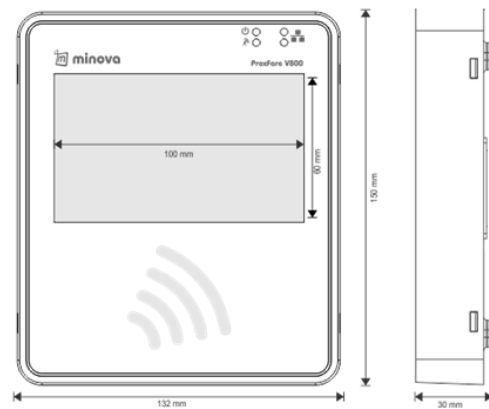
7 TERMINAL KIT & POWERING



8 FEATURES

- TFT Color LCD with UTF-8 multilanguage support
- 10/100Mb Ethernet
- Optional 2G/4G GSM interface
- RS232, RS485 and MDB interfaces
- Full NFC support
- 2 relay outputs 1.5A/24VDC
- 4 opto-isolated inputs
- Buzzer and Real Time Clock
- 32MB Flash-Memory
- 8MBit external flash memory
- Bootloader for firmware update
- +8V to +36V DC power supply
- 250mA @ +12V current consumption
- -30 to +85 °C ambient Temperature

9 DIMENSIONS



10 ORDERING CODES

| ARTICLE NR: | Ethernet | HF | LF | HITAG | MDB | 2G | 4G |
|-------------|----------|----|----|-------|-----|----|----|
| MCR08N-1100 | X | X | | | | | |
| MCR08N-1200 | X | X | X | | | | |
| MCR08N-1250 | X | X | X | X | | | |
| MCR08N-1300 | X | X | | | | X | |
| MCR08N-1400 | X | X | | | | | X |
| MCR08N-1500 | X | X | | | X | | |

