

# MCR04 RFID/NFC PoE-Reader

MCR004 R 1.0  
March 20, 2019

## Key Features

Frequency	13.56 MHz
Interface	Ethernet (PoE), GSM, RS232/485
Standards	ISO14443A
Supported Cards & Transponders	MIFARE® Family NTAG
Antennas	Internal
Relay	2 x 2A/24V
Power supply	+8V to +60V DC



## 1 DESCRIPTION

The MCR04 is an RFID & communication terminal designed to be used in **Access Control**, **Attendance Control** and **Contactless Payment** systems. It has several communication options such as Ethernet, GSM/GPRS, Wi-Fi, Bluetooth 4.2 and serial ports.

## 2 ELECTRICAL

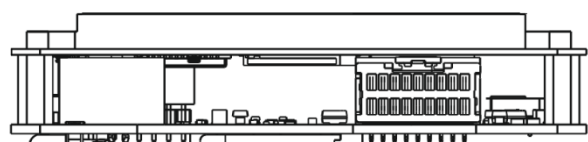
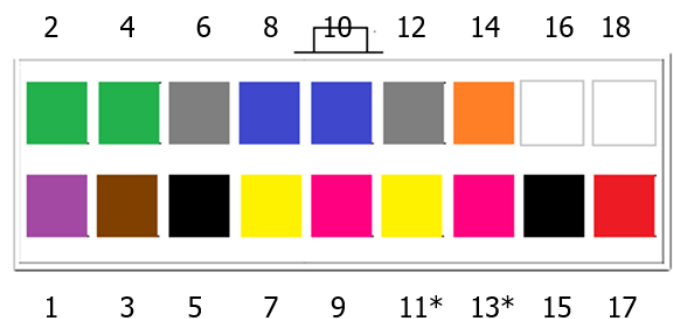
SYMBOL	PARAMETER	MIN	TYP	MAX	UNIT
VIN	Input Voltage PoE/Vin	+8	+12	+60	V
IIN	Input Current (VIN=+12V)	-	150	200	mA
VR	Maximum Reverse Voltage	-	58	-	V
TA	Ambient Temperature Range	-30	-	+85	°C
VTVS	TVS Clamping Voltage	+64.4	-	+93.6	V
IPEAK	TVS Peak Pulse Current	-	-	4.3	A
PDISS	TVS Power Dissipation	-	-	400	W
INPUTVMAX	Max. voltage of input pins	-6	-	+40	V
RS485-YOD	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. 2A / 24VDC				
<b>ESD Performance</b>					
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

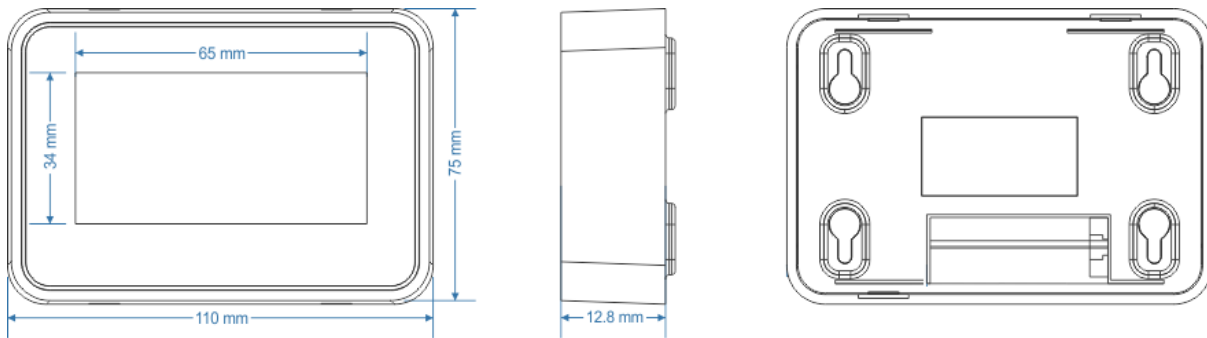
## 4 CONNECTOR PINOUT

Main Connector	
1	RS485-A
2	RELAY1-NC
3	RS485-B
4	RELAY1-NO
5	COM1-GND (RS232)
6	RELAY1-COM
7	COM1-RXD (RS232)
8	RELAY2-NC
9	COM1-TXD (RS232)
10	RELAY2-NO
11	COM2-RX (empty in GSM version)
12	RELAY2-COM
13	COM2-TX (empty in GSM version)
14	+5V OUT
15	POWER GND
16	EXT_IN1
17	POWER INPUT +12V nominal
18	EXT_IN0



## 5 DIMENSIONS

110x75x12.8mm



Cable length: 30cm



## 6 FEATURES

- 10/100Mb Ethernet with PoE (Power-Over-Ethernet) interface (IEEE 802.3af)
- RS232 or RS485 up to 230K Baud
- Integrated TCP/IP ( UDP,ICMP, FTP, NTP, Ping ) Software Stack
- Internal GSM/GPRS 2G Modem (optional)
- Internal Wi-Fi IEEE 802.11 b/g/n / Bluetooth BLE 4.2 Modem (optional)
- 3.3" Graphical LCD, 128 x 64 Pixels
- LED Blue-White Backlight
- 2 relay outputs 2A/24VDC
- 2 opto-isolated inputs
- Buzzer and Real Time Clock
- 8MBit external flash memory
- 4GB SD-Memory (optional)
- Bootloader for firmware update
- +8V to +60V DC power supply
- 200mA<sub>max</sub> @ +12V current consumption
- -30 to +85 °C ambient Temperature

## 7 ORDERING CODES

ARTICLE NR:	PoE	RS232	RS485	BLE	RELAY	GSM	INPUTS
MCR04G-1000	X				X		X
MCR04G-1100		X			X		X
MCR04G-1200			X		X		X
MCR04G-1300	X				X	X	X

