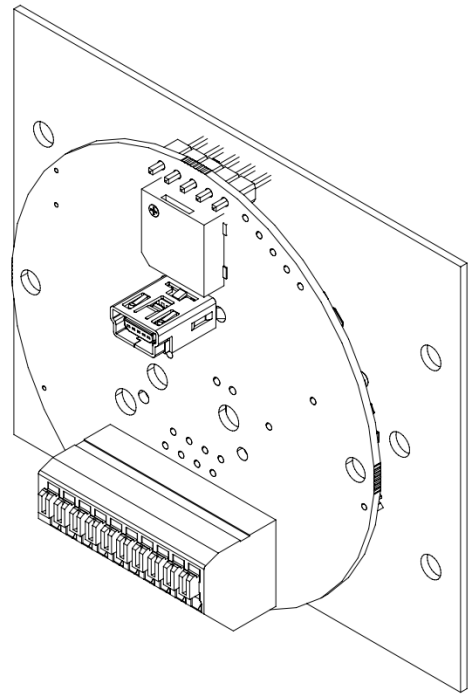


# MCR01P RFID Reader

RS232 / RS485 / Ethernet / QR Code Reader



The **MCR01P RFID Reader** is a robust and flexible device designed for industrial environments. It supports QR-Code reading, Ethernet, RS232/RS485 and USB interfaces, making integration easy across various systems. With a strong antenna and optional keyboard emulation via USB, it enables reliable card/tag reading and smooth operation in complex RFID setups.

## Key features

- **Interfaces RS232 / RS485\* / Ethernet\***  
Provide reliable serial communications and Ethernet for industrial systems.
- **Wide operating voltage range**  
Suitable for **+12V** or **+24V** systems.
- **Transponders**  
MIFARE® DESFire/Plus & Classic/Ultralight, NTAG, I-CODE
- **Full NFC Support**  
Offers full NFC compatibility for contactless communication
- **QR Code Reader\***  
Available with integrated QR Code Reader + IPS Display with Panel Mount ABS Enclosure
- **Secure Element\***  
Hardware secure element for cryptographic key management and authentication.
- **RS485 ModBus\* & OSDP\***
- **Bootloader**  
Includes bootloader for easy firmware updates
- **Powerful Antenna**  
Reads cards/tags up to 100mm

## Ideal for

- EV-Charging Stations
- Industrial Automation
- Access Control Systems
- Public Transportation
- Retail and POS Systems
- Vending Machines\*
- Library Management
- Parking Management

\* Optional units ( may require additional parts )



Access Systems



Logistik Supply chain



EV-Charger



Industrial Automation



Time Tracing



Healthcare



Shop PoS



Public Transport



Parking



ATM



Library



Home Automation



Telemetry Systems

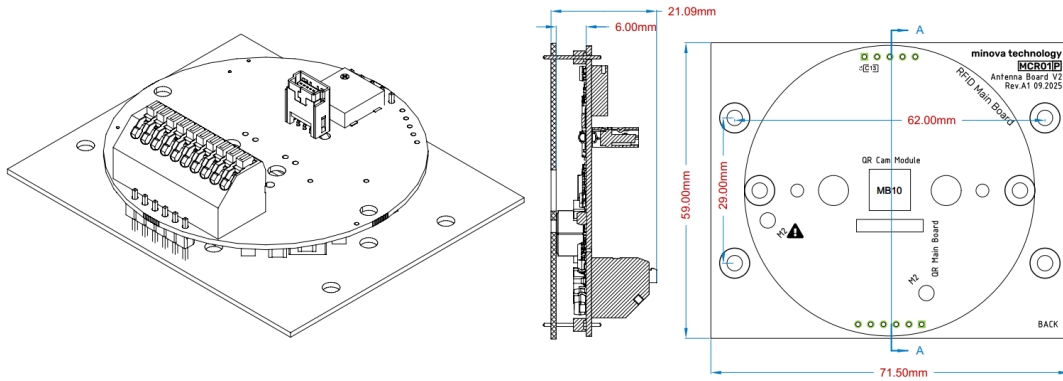
## Technical Data

Operating Frequency	13.56 MHz	
Dimensions ( Ant. Board )	59x71.5 mm See under Mechanical Dimensions below.	
MTBF	500.000h	
Interfaces	RS232 RS485 USB Optional: Wi-Fi / BLE Ethernet 10/100 Mbps	
Supported Cards & Transponders	MIFARE®-DESFire/Plus MIFARE®-Classic/Ultralight NTAG I-Code	
Antenna	External	
Temperature	-30°C to +85 °C	
Relative Air Humidity	5% up to 95% (non-condensing)	
Power Supply	+6V to +40V DC USB Bus Powered	
Current Consumption	Avg. 100 – 250 mA	
Weight	20 g	
Supported Standards	ISO14443A/B ISO15693	
Compliances	EMC	EN 301489 EN 55022 EN 300330 RED 2014/53/EU
	Environment	RoHS Compliance REACH 1907/2006

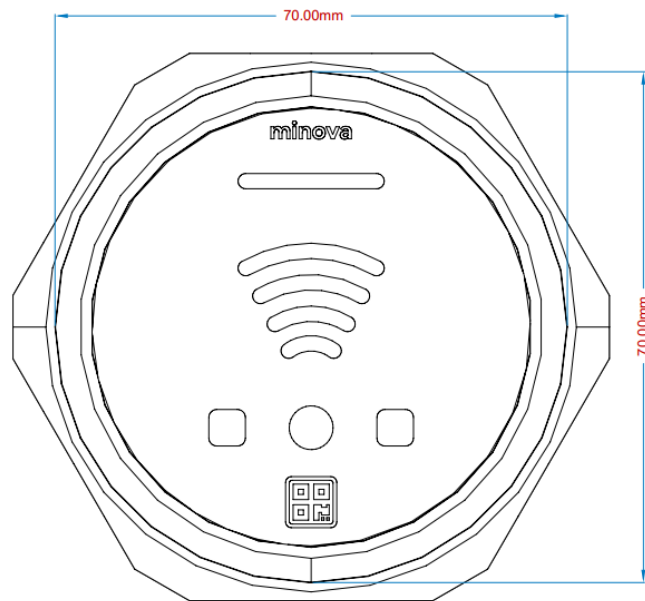
## Mechanical Dimensions

### Module Type

The following illustrate the dimensions and physical layout of the **MCR01P RFID Reader/Writer** designed for seamless integration into various environments. All values are in millimeters. ( Mount Holes: M3 x 4 )

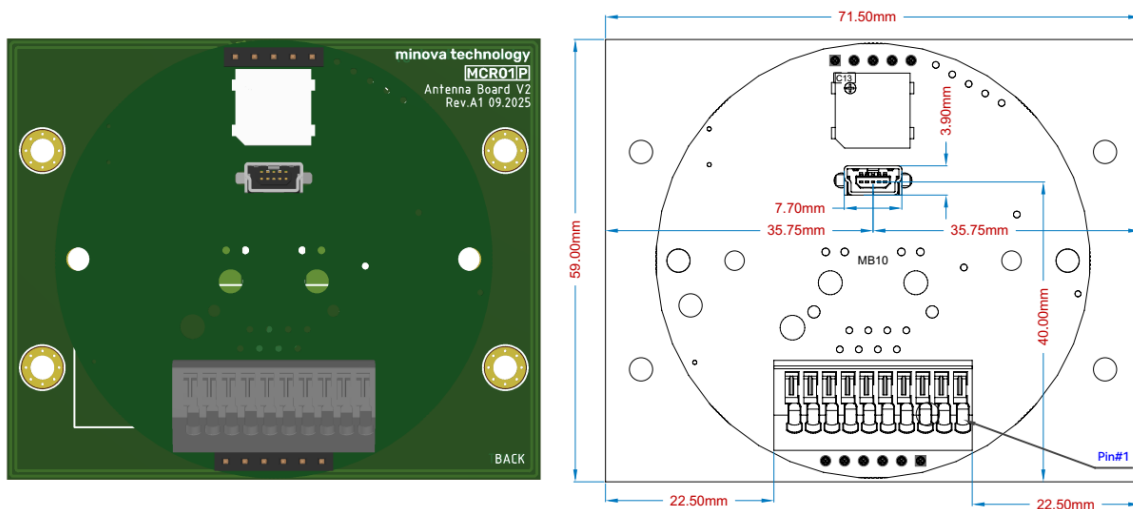


ABS Enclosure ( Panel Mount Model )



\*Details regarding the ABS boxed model are given in Annex-1.

Connector Details and Pinout ( Back View )



Connector: Spring Clamp 10-Pin Terminal Block / 2.50 mm Part Number: DG250-2.5-10P, 20~24 Awg Cable

Pin-1 in TB is the most-right as viewed from back side ( as shown above )

Main Connector	RS232 Mode	Suggested Cable Color
1	Power IN+	Red
2	GND ( Power )	Black
3	RS232 TXD	Green
4	RS232 RXD	Yellow
5	GND ( Signal )	Black
6	RS485-B*	Purple
7	RS485-A*	Brown
8	Digital Input* ( Optically Isolated )	Gray/White
9	Relay Out* ( Normally Open )	Blue
10	Relay Out* ( Normally Open )	Blue

\*Optional Units

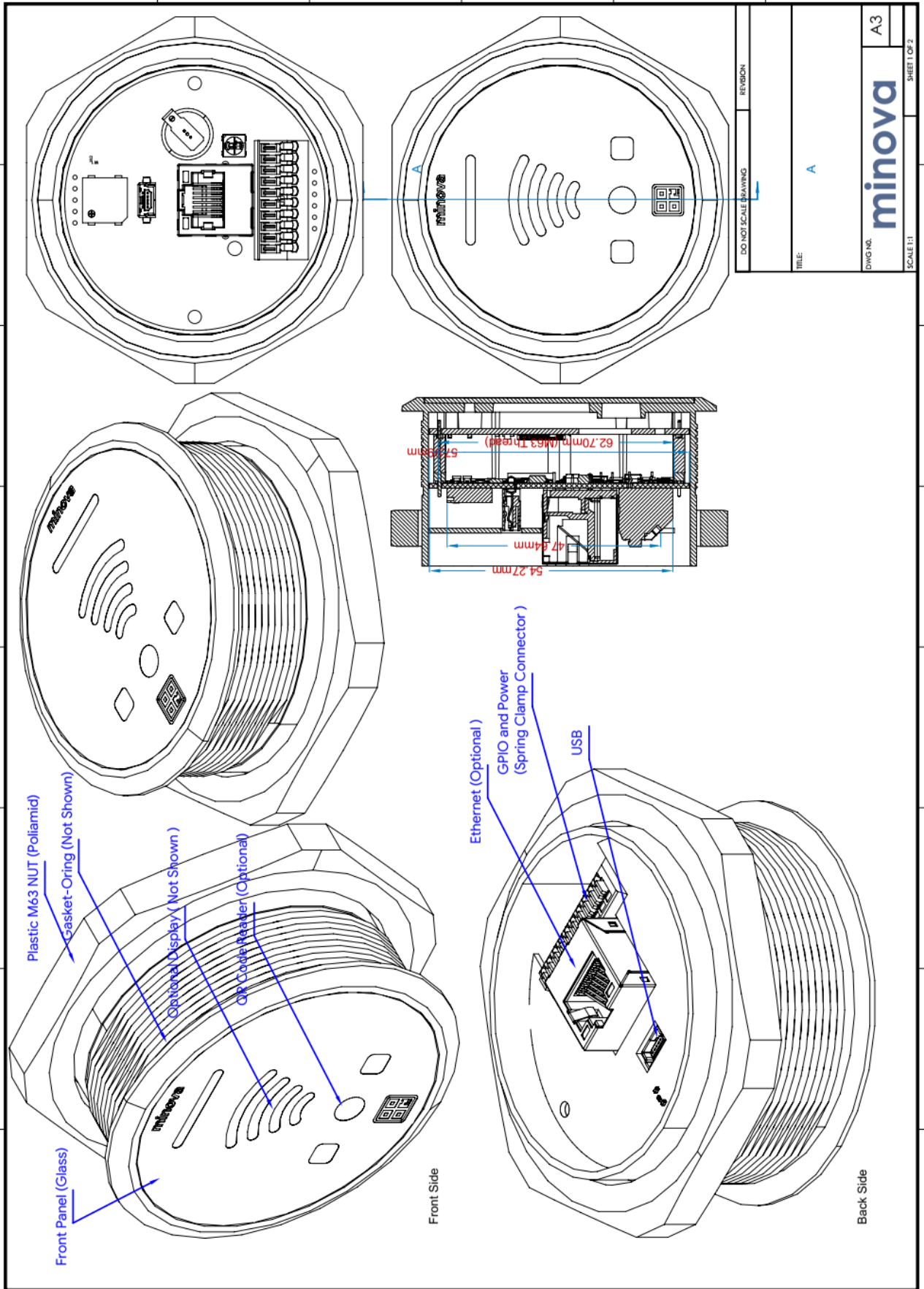
## Ordering Codes

Ordering Code	RS232	RS485	USB	QR	Antenna	LCD	Ethernet
MCR01P-1100	✓		✓	N/A	✓	N/A	N/A
MCR01P-1120		✓	✓	N/A	✓	N/A	N/A
MCR01P-1130	✓	✓	✓	N/A	✓	N/A	✓
With ABS Enclosure							
Ordering Code	RS232	RS485	USB	QR	Relay&Input	LCD	Ethernet
MCR01P-1200*	✓	✓	✓	✓	✓	N/A	✓
MCR01P-1220*	✓	✓	✓	✓	✓	✓	✓

\*12xx series with ABS enclosure.



# Annex-1



DO NOT SCALE DRAWING	REVISION
TITLE: A	
DWG. NO. minova	A3
SCALE: 1:1	SHEET 1 OF 2

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