#### **CONTACTLESS CARD READERS**

# RFID & Acess Control Terminal



minova

technology



MCRO8-G is a multi-purpose, programmable RFID & Communication terminal usable in Access Control, Closed-Circuit Payment Systems, Telemetry & IoT, Automation, etc.

Compared to MCR08 series, it supports rich communication technologies such as GPRS/NB-IoT/Wi-Fi/Bluetooth thanks to Ethernet and Mini PCIe expansion slots.

Terminal is also provided as OEM module for system integrators.

#### Application Areas

- Access Control
- Cashless and/or Closed Circuit Payment Systems (Mass Transit Systems, Campus Card, Cafeteria, etc.)
- E-Ticket Applications (with Turnstile & Barcode reader)
- Reservation and Registry System
- Electric Charging Stations
- Smart Home & Building Automation
- Vending & Kiosk Automats
- RFID & Automation HMI Operator Panel
  - Object Tracking & Detection (ICODE etc.)
- IoT Gateway & Indoor Monitoring & Tracking
- Telemetry Monitoring & Tracking Display

#### GSM/GPRS and Ethernet Connection

With web service or TCP/IP connection, can query a contactless smart card from a server, can write messages on the LCD display via sent response packages, create an audio alarm and control mechanical systems such as turnstiles, doors, etc.

#### MIFARE® Standard

Performs read and write processes of MIFARE® Classic 1K, Plus, DesFIRE and Ultralight cards rapidly and reliably. Supports static and dynamic encoding.

#### Barrier and Turnstile Control

With relay output and optically isolated input, can directly control turnstiles and barriers, read access info and transmit when needed. Connects to additional systems through RS232 and RS485 connection.

### Closed Circuit Payment

Performs validation procedures such as payment, credit deduction, time and day controls. Manages permitted and banned cards with Whitelist and Blacklist feature.

Minova Teknoloji Elektronik San.ve Tic.Ltd.Şti.

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# RFID & Acess Control Terminal



- 4.3" TFT Capacitive / Resistive Touchscreen
- 13.56 MHz Contactless MIFARE®/NFC/RFID Reader
- Ethernet and GPRS/2G/3G/LTE or Wi-Fi & Bluetooth Communication
- PoE (Requires Additional Hardware)
- Online/Offline Operation
- Easy Configuration & Control Over Network
- Internal Relay & Digital Input

### $\times$ TECHNICAL SPECIFICATIONS

Read/Write	MIFARE®, ISO14443A/B Classic, DESFire, Plus and Ultralight Contactless Card Read/Write ISO/IEC 15693* ISO/IEC 18000* (ICODE) 50 ohm External RFID Antenna Output Port	Processor & Memory	32-bit ARM Cortex CPU 8 GB Internal microSD 1 MB Internal NOR Flash Memory 128 KB FRAM*
		Input/Output	Relay Outputs (1.5A Dry Contact) (x2) Optically-Isolated Digital Inputs (x4)
Display Communication	4.3" TFT Capacitive/Resistive Touchscreen LCD Display The Ethernet 10/100 Mbps	Additional Specifications	Offline Operation Mode Battery Backup Internal Real Time Clock (RTC) Real Sound Output (Internal Amplifier and Loudspeaker) LED Indicators (x4)
	Integrated TCP/IP ( UDP,ICMP, FTP, NTP, Ping ) Software Cluster	Size	132 X 150 x 30 mm
	Internal GSM/GPRS 2G/3G/LTE/ NB-IoT miniPCIe Modem* Internal Wi-Fi IEEE 802.11 b/g/n Bluetooth BLE 4.2 miniPCIe Modem* RS232 Port (300-115200 Baud) RS485 Port (300-115200 Baud) USB 2.0 ( VCOM, HID )	Power	6-35V DC Operating Voltage PoE (with PoE Injector Hardware)
		Environmenta Conditions	I -40 °C +85 °C (Industrial Operating Range) -30 °C +80 °C (Storage Range)

\* Optional

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