## General Description

CThe MCT12M series readers are outdoor RFID access terminals dedicated for RACS 5 access control system. Readers need to be connected to a host device, which usually is an access controller, and can't operate autonomously. The MCT12M terminal can read either factory programmed card serial number (CSN) or any user card number (PCN) programmed in encrypted data blocks or files on a card. Because the CSN card numbers are not encrypted and can be duplicated the PCN numbers should be used for access control systems in general. For systems which require the highest security level the MIFARE® DESFire EV1 or MIFARE® PLUS cards, supported by MCT12M-DIO and MCT12M-DIOBK terminals, are recommended. The MCT12M series readers with option IO offer the set of inputs and outputs which, in most cases, should be capable to operate single door passage without necessity to use inputs or outputs located on access controller or expansion unit. There are three inputs available on the reader which can be individually configured for various pulse times and contact topologies. Optionally, inputs can be configured for Double Wiring function which allows operation with two NO/NC contacts connected to a single input and, doubles the total number of input signals monitored by the reader. Reader offers two open collector transistor outputs and one relay type output with single isolated NO/NC contact. All outputs can be configured for Normal Polarity (output normally OFF) or Reverse Polarity (output normally ON). Communication with controller is achieved through RS485 bus which can utilize free topology (e.g. three, star and combination of them) and any type of signal cables. The maximal distance between controller and reader is limited to 1200m of cable run. Configuration of the reader as well as firmware upgrade is made through RS485 and require RogerVDM (Windows) program. Because of its narrow shape the MCT12M can be installed on door frame and other door construction elements with limited space.

## Features:

- 13.56 MHz ISO14443A, reads factory programmed card number (CSN):
  - MIFARE® ULTRALIGHT
  - MIFARE® Classic 1k and 4k
  - MIFARE® Plus
  - MIFARE® DESFire EV1
- Reads user programmed card number (PCN):
  - MIFARE® Classic 1k and 4k
  - MIFARE® Plus ([1])
  - MIFARE® DESFire EV1 ([1])
- Up to 7 cm reading range for Ultralight and Classic ISO cards
- Up to 3 cm reading range for DESFire and Plus ISO cards
- Support for normal and long card reading method
- RS485 communication interface
- Three LEDs
- Three parametric type input lines ([2])
- Configurable input pulse range (50...5000ms) ([2])
- Double Wiring input option([2])

([1]) refers to MCT12M-DIO and MCT12M-DIOBK
([2]) doesn't refer to MCT12M and MCT12M-BK
([3]) doesn't refer to product version without keypad

- Relay output NO/NC 1.5A/30V ([2])
- Two transistor outputs 150mA/15V ([2])
- Normal or Reverse output polarity([2])
- Buzzer with loudness level adjustment
- Silicon rubber keypad with regulated backlight level([3])
- Two function keys ([3])
- Tamper contact with detection of enclosure detachment and opening
- 12VDC power supply
- Configuration and firmware upgrade through RS485 (RogerVDM)
- Outdoor environment
- Dimensions (H x W x D):
  - low profile bottom part of enclosure: 152,5x46x23mm
  - high profile bottom part of enclosure: 152,5x46x35mm
- CE mark

| Order guide | |
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| *Item* | *Description* |
| **MCT12M** | Standard version with keypad |
| **MCT12M-BK** | Standard version without keypad |
| **MCT12M-IO** | Extended version with keypad, on-board IO lines |
| **MCT12M-IOBK** | Extended version without keypad, on-board IO lines |
| **MCT12M-DIO** | Extended version with keypad, on-board IO lines, DESFire and Plus card support |
| **MCT12M-DIOBK** | Extended version without keypad, on-board IO lines, DESFire and Plus card support |

### Legal Notice

ROGER sp. z o.o. sp. k.
Gościszewo 59
82-400 Sztum
Poland

**T.** +48 55 272 0132
**F.** +48 55 272 0133
**E.** roger@roger.pl
**I.** www.roger.pl

roger®