

# Roger Access Control System 4

Application note no. S4001

Document version: Rev. A

## Mobile identifiers in RACS4 system

Note: This document refers to RACS 4:

- PR Master 4.5.30.1183 or newer,
- PRxx2 FW 2.16.1665 or newer,
- PRxx1 FW 2.18.1372 or newer

### ***Introduction***

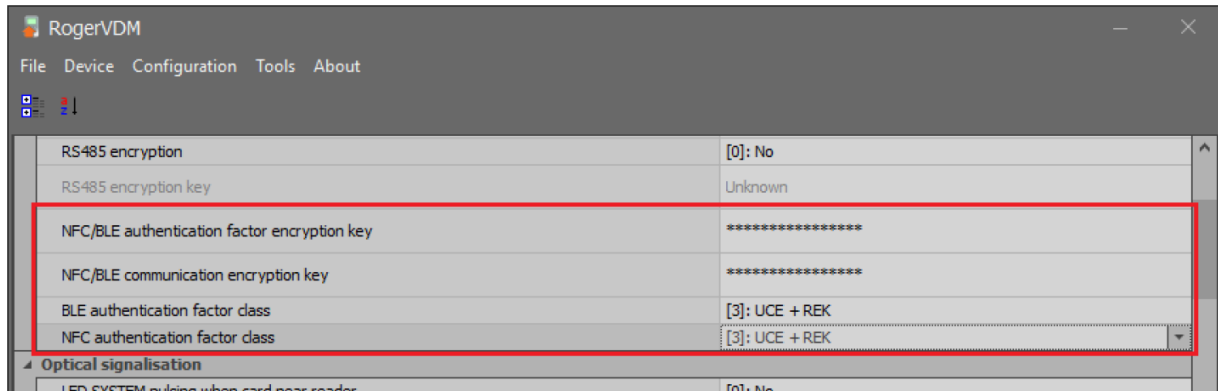
Users can be identified in RACS 4 access control system by means of proximity cards, PINs, fingerprints and also mobile devices with Android or iOS systems. The mobile identification can be in NFC (Near Field Communication) technology or BLE (Bluetooth Low Energy) technology on such terminals as MCT80M-BLE and MCT88M-IO which must be connected to PRxx1 series or PRxx2 series access controller via MCI-2 interface.

The solution enables to:

- Identify users via their mobiles devices with RMK app installed instead of or in parallel to proximity cards and/or other identifiers.
- Identify users on MCT terminals by:
  - selection of credential on screen and then reading mobile device at the terminal (NFC),
  - selection of credential on screen and then reading mobile device in distance of up to 10 meters from the terminal (BLE),
  - making gesture with mobile device such as rotating and shaking (BLE).

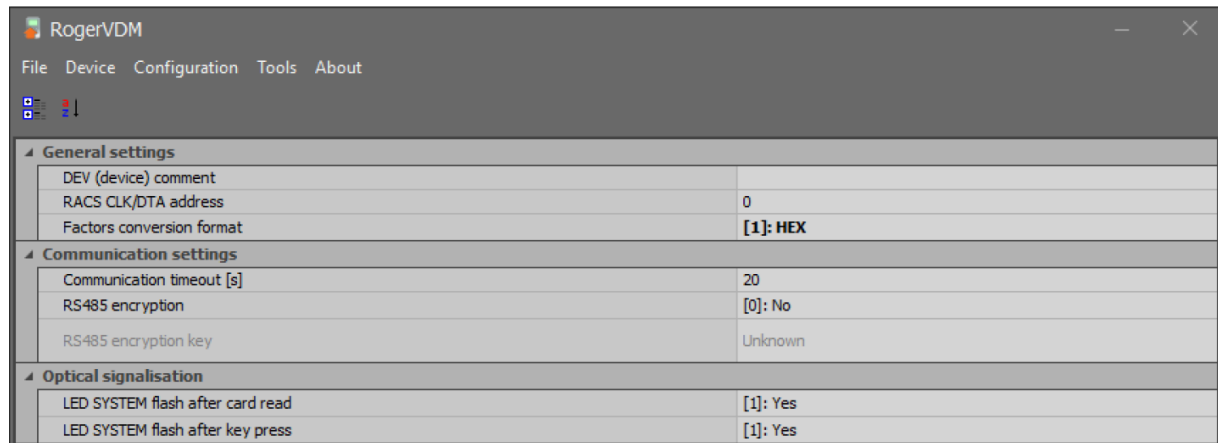
### ***MCT terminal configuration***

According to their installation manuals, the low-level configuration of MCT88M-IO and MCT80M-BLE terminals is conducted with RogerVDM software after their connection to computer via RUD-1 interface. In case of terminals for mobile identification except for addressing on RS485 bus with ID=100 address, it is possible to define such parameters as *NFC/BLE authentication factor encryption key and NFC/BLE communication encryption key*. Additionally factor class can be defined both for NFC and BLE. It is recommended to apply the option [3]: *UCE + REK* for both classes.

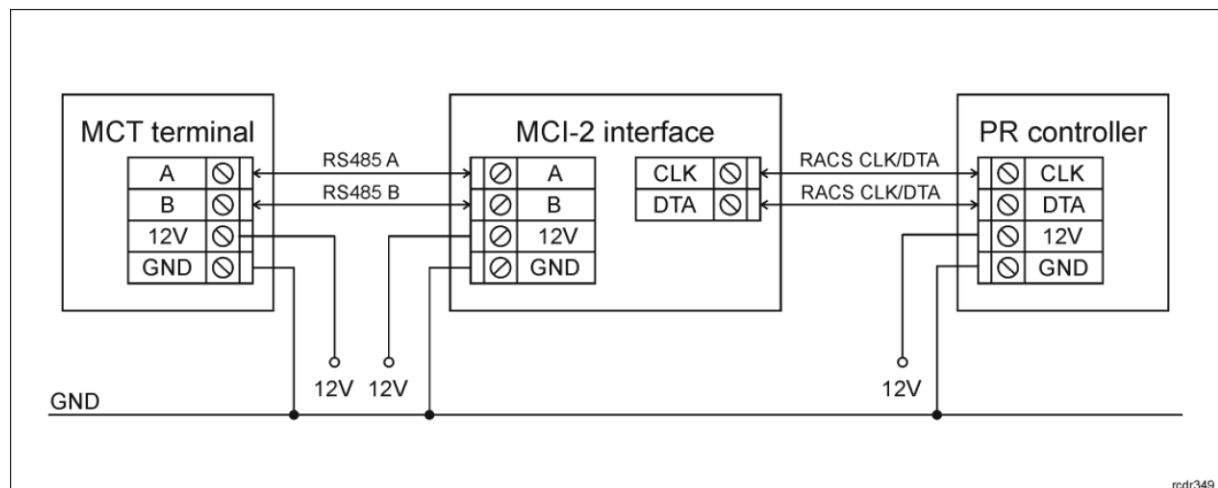


### MCI-2 interface configuration


According to its installation manual, the low-level configuration of MCI-2 converter is conducted with RogerVDM software after its connection to computer via RUD-1 interface. It is necessary to configure RACS CLK/DTA address and Factors conversion format as below. If encryption on RS485 bus is applied, then the same settings must be entered on MCT terminal side and MCI-2 interface side.



Terminal and converter must be connected to access controller according to the drawing given in MCI-2 installation manual which is also shown below.

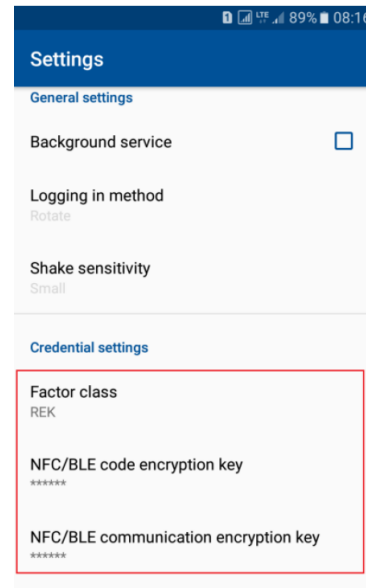


### RMK app configuration

Roger Mobile Key (RMK) app for Android and iOS systems can be downloaded and installed respectively from Google Play and App Store. After its installation, select  in the top right corner and then Settings. Enter the same encryption keys as in case of previous configuration of MCT terminals or leave empty if they were not defined in MCT.

Encryption keys and Factor class will be applied only when credential is defined. Therefore, it is possible to have credentials with different keys and class in the app, which can be then used on different MCT terminals.

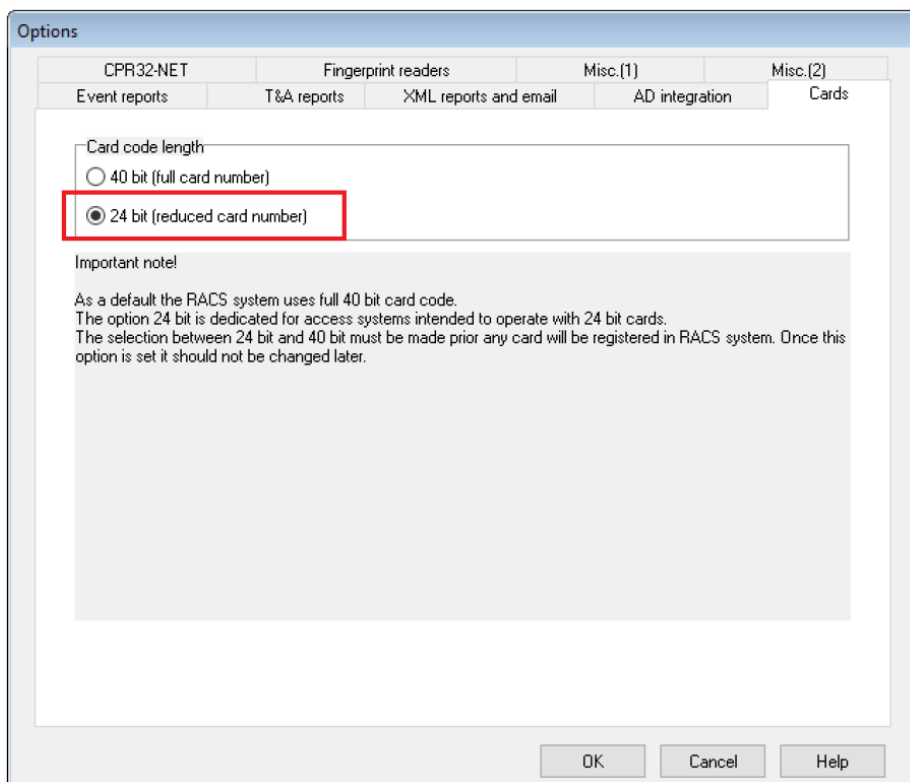
More information on RMK app is given in its manual which is available at <https://roger.pl>.



### PR Master software configuration

In order to configure PR Master software in regard of mobile identifiers:


- Start PR Master software and configure the system in regard of typical steps i.e. establish connection with controllers and detect them on RS485 bus of a subsystem.
- In the top menu of PR Master software select *Tools > Options > Cards* and then select the option *24bit (reduced card number)*.



## Mobile identifiers defining

- When PR Master software is started with /RMK parameter then RMK code is created in the properties of created or edited user and this code is based on entered card number.

The screenshot shows the 'User properties' dialog box with the 'Identification' tab selected. The 'RMK Code' field is highlighted with a red box and contains the value '9602D2'. Other fields include PIN, Card code (40, 24, and 8,16 bit), and Fingerprint templates (0). The 'Access period' section has checkboxes for 'Start date' and 'End date'. The 'Fingerprint templates' section shows a graphic of two hands labeled 'Left' and 'Right' with 'Scan' and 'Clear' buttons below it. The 'OK', 'Cancel', 'Report', and 'Help' buttons are at the bottom.

- Start RMK app on your mobile phone.
- In the top right corner select  and then *Add credential*.
- On the screen select Bluetooth (BLE) or NFC, name the factor and then enter its value as in PR Master software. When the identifier is created then encryption keys and class are applied according to settings in RMK app. They must be the same as in case of terminal where user will identify.

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