

Magnetic card reader connection and configuration

Introduction

LS-M800 series Communication Protocol was integrated into Ruptela FM devices. Now user can connect HCC750 Magnetic card reader to the FM device via its RS232 interface and read magnetic card ID.

Magnetic card reader can be connected to these FM devices:

- FM-Tco4 HCV
- FM-Tco4 LCV
- FM-Pro4

This feature description applies to FM devices with the latest firmware version in them. You can get the newest firmware and configurator from our documentation website: doc.ruptela.lt

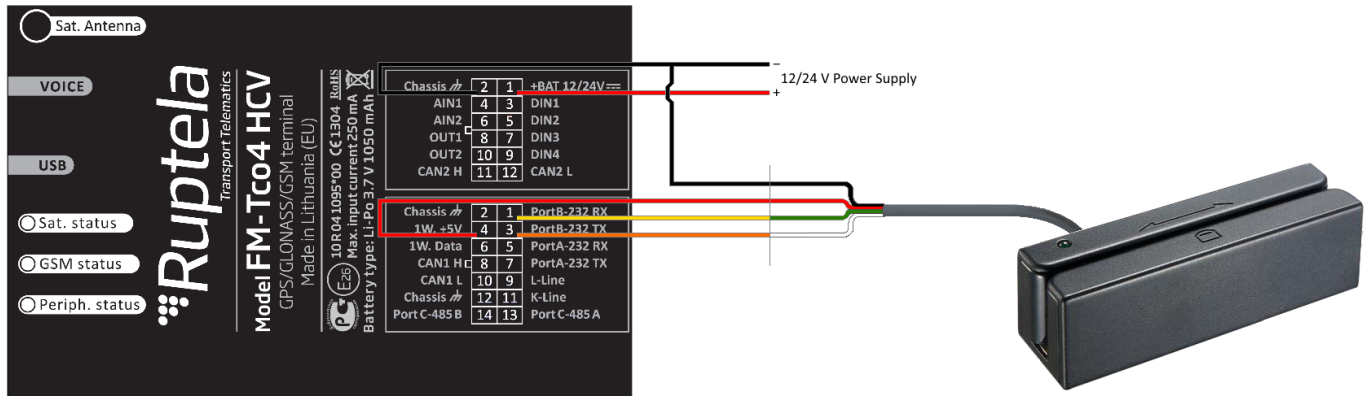
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Document change log

Date	Version	Change details
2016-08-18	1.0	Initial draft.
2017-02-21	1.1	New configuration options described.
2018-11-15	1.2	Compatible device list updated.

Connection



FM Device side	Magnetic card reader side
Orange - PortB-232 TX	White - RS232 TX
Yellow - PortB-232 RX	Green - RS232 RX
Red - 1W. +5V	Red - Power supply +
Black - Chassis	Black - GND

Configuration

Follow these steps to configure your FM Device:

1. In the main configurator window choose your device (*FM-Tco4 HCV*, *FM-Tco4 LCV* or *FM-Pro4*).
2. **IO events** "Options" button opens up a new "IO settings" window, here you can enable or disable IO parameters.
3. In **Protocol selection** section put a tick in **Send I/O data with v1.1 protocol** checkbox.
4. In the Interfaces section, put a tick either on **PortA** or **PortB** checkbox. This should be the same FM device interface that was used in connection to the Magnetic card reader.
5. Use the drop down list on the right and choose *Magnetic card reader*.
6. Click on the "Config" button. Magnetic card reader options window will be displayed.
7. In the **Track selection** dropdown list choose, which track the device should read. One of three tracks can be used.
8. Set **Offset** field value. This defines how many starting symbols from the ID should be skipped, when reading card ID from the specific track. Default offset value is 0.

Note

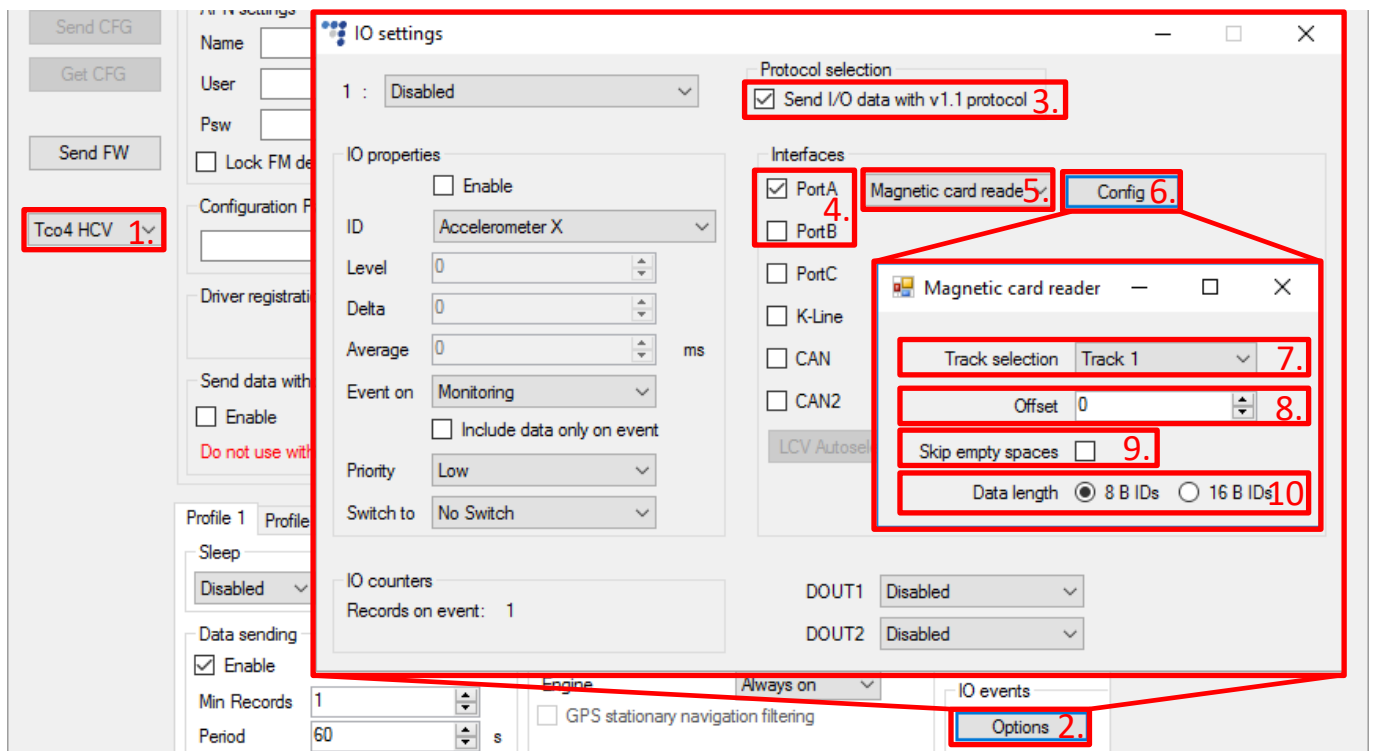
Each track has specific offset limitations:

- Track1: Offset can be from 0 up to 78 symbols.
- Track2: Offset can be from 0 up to 39 symbols.
- Track3: Offset can be from 0 up to 108 symbols.

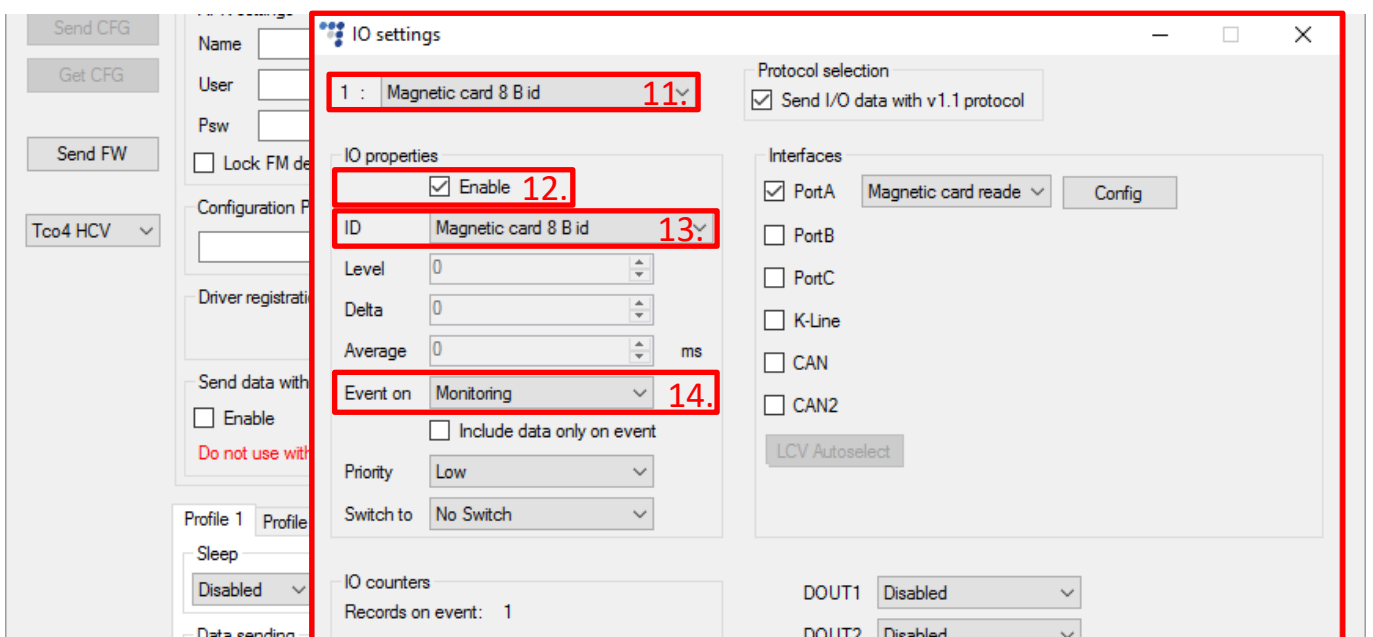
9. If you want to omit all the gaps in the ID, then tick the **Skip empty spaces** check box.
10. Tick one of the **Data length** radial check boxes and choose how many bytes of data should be read from the chosen track. Default value is 8 bytes. (If offset is used, the device will read bytes that are situated after skipped symbols).

Note

If you change the data length, all entries in the Authorized IDs list will be deleted.



11. Select a slot that you want to enable.
12. In the **IO properties** section tick the **Enable** check box, otherwise the slot will remain empty.
13. **ID** contains the parameters list. Choose a parameter you want to enable for the selected slot. Magnetic card reader requires "Magnetic card 8 B ID" or "Magnetic card 16 B ID" IO parameter to be enabled. (Parameter name depends on what data length was chosen in magnetic card reader's configuration settings).
More details about this parameter available in "Magnetic card reader IO parameters" chapter below.
14. Choose **Event on** field values for each parameter. "Magnetic card 8 B ID" or "Magnetic card 16 B ID" IO can generate records with event on *Monitoring* or *Change*.



Magnetic card reader IO parameters

IO parameter "Magnetic card 16 B ID" is comprised of two FM IO parameters. These two I/O's will be pieced together in server side. "Magnetic card 8 B ID" has the usual structure.

IO ID	Parameter name in FMIO list	Parameter name in configurator	Size, B	Description
581	Magnetic _Card_ID1	Magnetic card 16 B ID	8	First part of 16 B magnetic card ID
582	Magnetic _Card_ID2	Magnetic card 16 B ID	8	Second part of 16 B magnetic card ID
617	Magnetic _Card_ID3	Magnetic card 8 B ID	8	8 B magnetic card ID

Note

To enable "Magnetic card 8 B ID" or "Magnetic card 16 B ID" parameter in the IO settings window you have to use extended protocol version v1.1.