

Ultra-High Frequency RFID reader

Introduction

Ultra-High Frequency (UHF) RFID readers can be used in RFID applications that require a higher data transfer rate and/or a longer read range. These readers support 12 byte ID tags.

UHF RFID readers are compatible with the following FM devices with the latest firmware version:

- FM-Tco4 HCV/HCV 3G
- FM-Tco4 LCV/LCV 3G
- FM-Pro4/Pro4 3G

You can get the latest firmware and configurator from our documentation website: doc.ruptela.lt

Legal notice

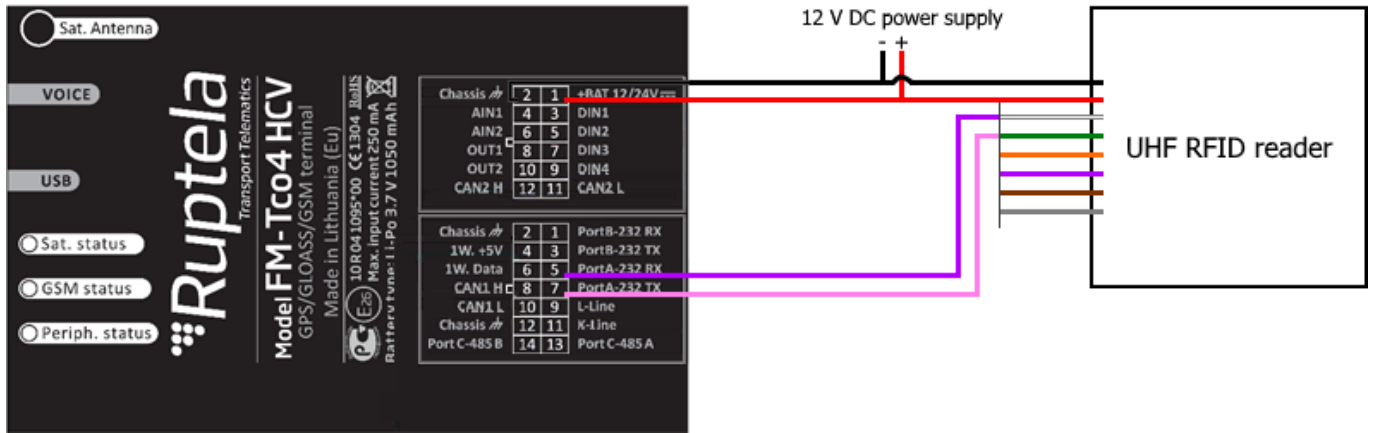
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Document change log

| Date | Version | Change details |
|------------|---------|----------------|
| 2018-03-08 | 1.0 | Initial draft. |

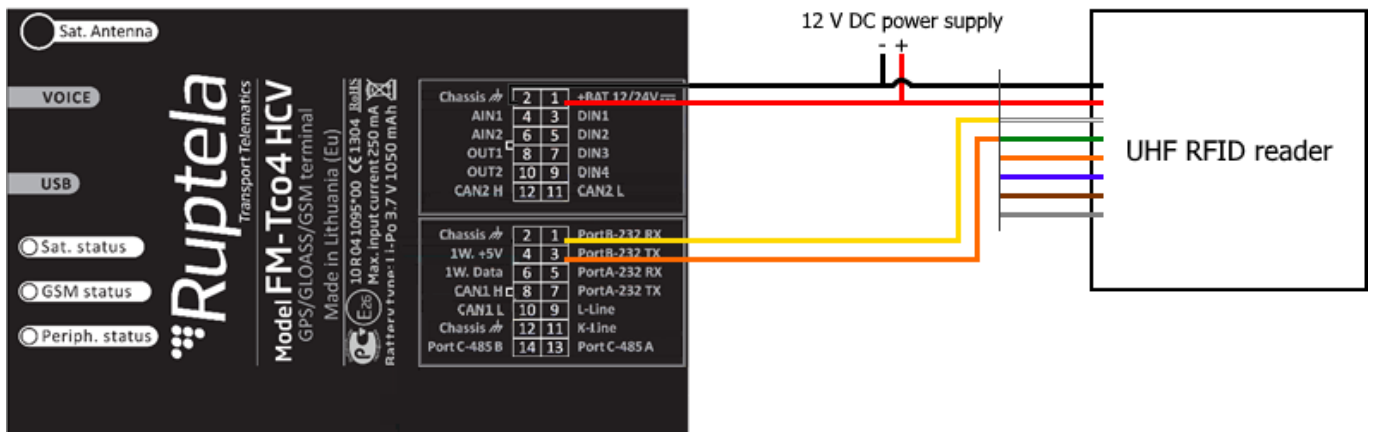
Connection to FM device

Connect the UHF RFID reader to your FM device as follows (if you want to use PortA):



| FM device | UHF RFID reader |
|-----------------------|-----------------|
| Black – Ground | Black – Ground |
| Red – 12/24 V DC | Red – 12 V DC |
| Purple – PortA-232 RX | White – RX |
| Pink – PortA-232 TX | Green – TX |
| Not used | Orange – 485R- |
| Not used | Purple – 485R+ |
| Not used | Brown – Ground |
| Not used | Grey – Trigger |

Connect the UHF RFID reader to your FM device as follows (if you want to use PortB):



| FM device | UHF RFID reader |
|-----------------------|-----------------|
| Black – Ground | Black – Ground |
| Red – 12/24 V DC | Red – 12 V DC |
| Yellow – PortB-232 RX | White – RX |
| Orange – PortB-232 TX | Green – TX |
| Not used | Orange – 485R- |
| Not used | Purple – 485R+ |
| Not used | Brown – Ground |
| Not used | Grey – Trigger |

FM device configuration

In order to configure your FM device to work with the UHF RFID reader, follow these steps:

1. Open the FM device configurator and select your device model in the drop-down list.
2. Click on the **Options** button in the IO events section. The **IO settings** window will open.
3. Mark the **Send I/O data with v1.1 protocol** checkbox. Doing so will delete all unsent records.
4. In the **Interfaces** section, select the port to which you connected the UHF RFID reader.
5. A drop-down list will appear next to the selected port. Select **UHF-RFID reader** in the drop-down list.
6. Select a free slot in which you want to enable the IO parameter.
7. In the **ID** drop-down list, select **UHF-RFID reader PortA (PortB)**.
8. Mark the **Enable** checkbox. The parameter name will be visible in the selected slot.
9. Select **Change** in the **Event on** drop-down list.

After the configuration is done, close the **IO settings** window and send the configuration to your device.

Note

It is not recommended to use different kinds of RFID readers at the same time (do not use RFID readers together with UHF RFID readers).