

Kimax weight sensor

Introduction

Kimax weight sensors can be used for vehicle load monitoring by measuring the pressure on the air suspension system for each axle individually. This allows determining the total weight of the vehicle with/without load, how much the load weighs and how much weight is applied to each axle.



Kimax weight sensors can be configured to read vehicle weight data for truck and/or trailer. This data can then be sent to a server.

Compatibility

Kimax weight sensors are compatible with the following Ruptela FM devices with the latest firmware version:

- FM-Pro4

Note

Only Kimax weight sensors with a software version of 2.90 or above are supported.

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

Legal notice

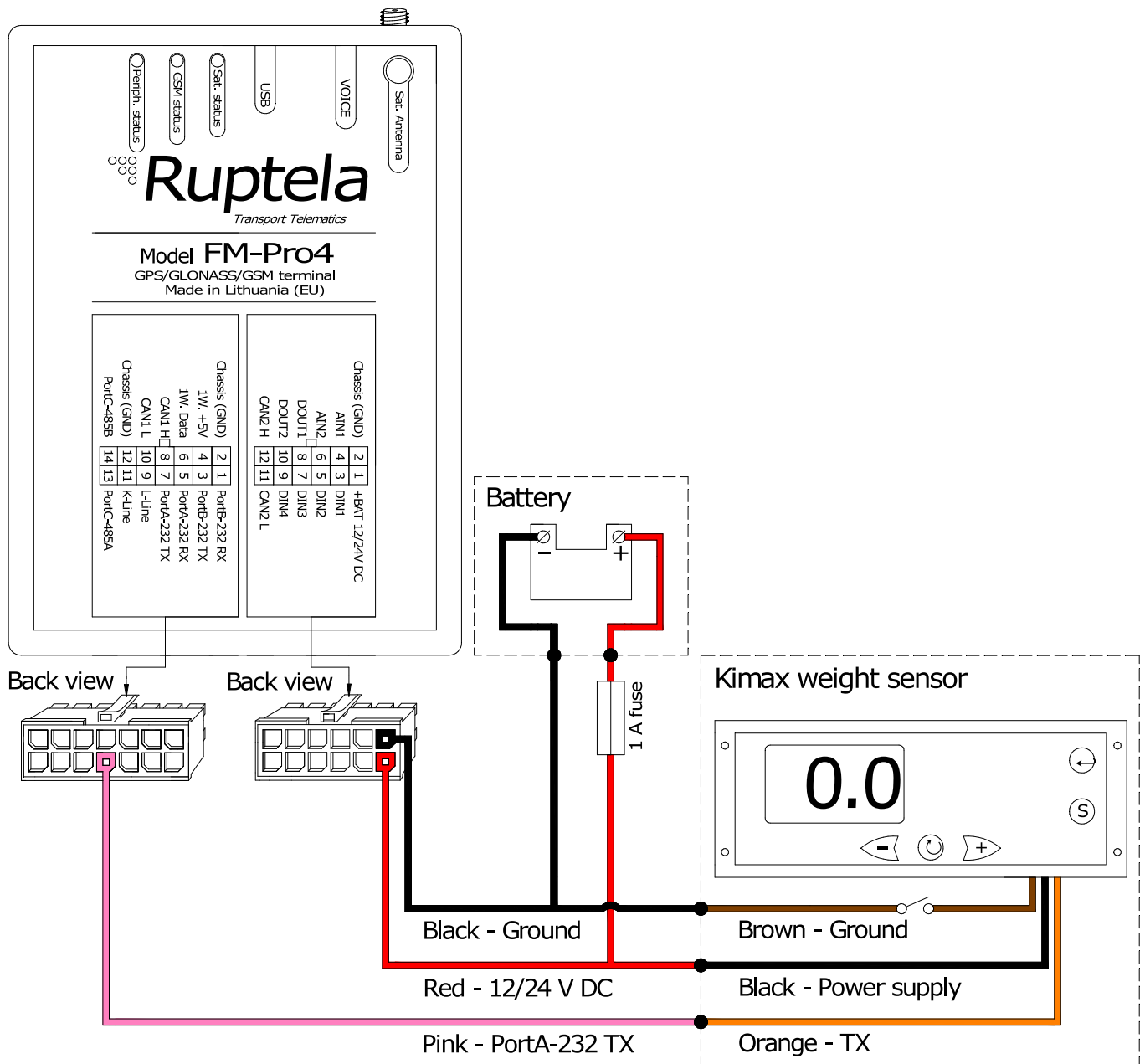
Copyright © 2019 Ruptela. All rights reserved. Reproduction, transfer, distribution or storage of parts or all of the contents in this document in any form without the prior written permission of Ruptela is prohibited. Other products and company names mentioned in this document are trademarks or trade names of their respective owners.

Document change log

Date	Version	Change details
2018-08-20	1.0	Initial draft.
2019-06-26	1.1	Added note regarding supported software version. Updated connection schematic.

Weight sensor connection to FM device

Connect the weight sensor to your FM device as follows (in this schematic PortA is used). Make sure the weight sensor power supply is connected using a fuse and a switch.



Alternatively, you can connect the weight sensor to PortB:

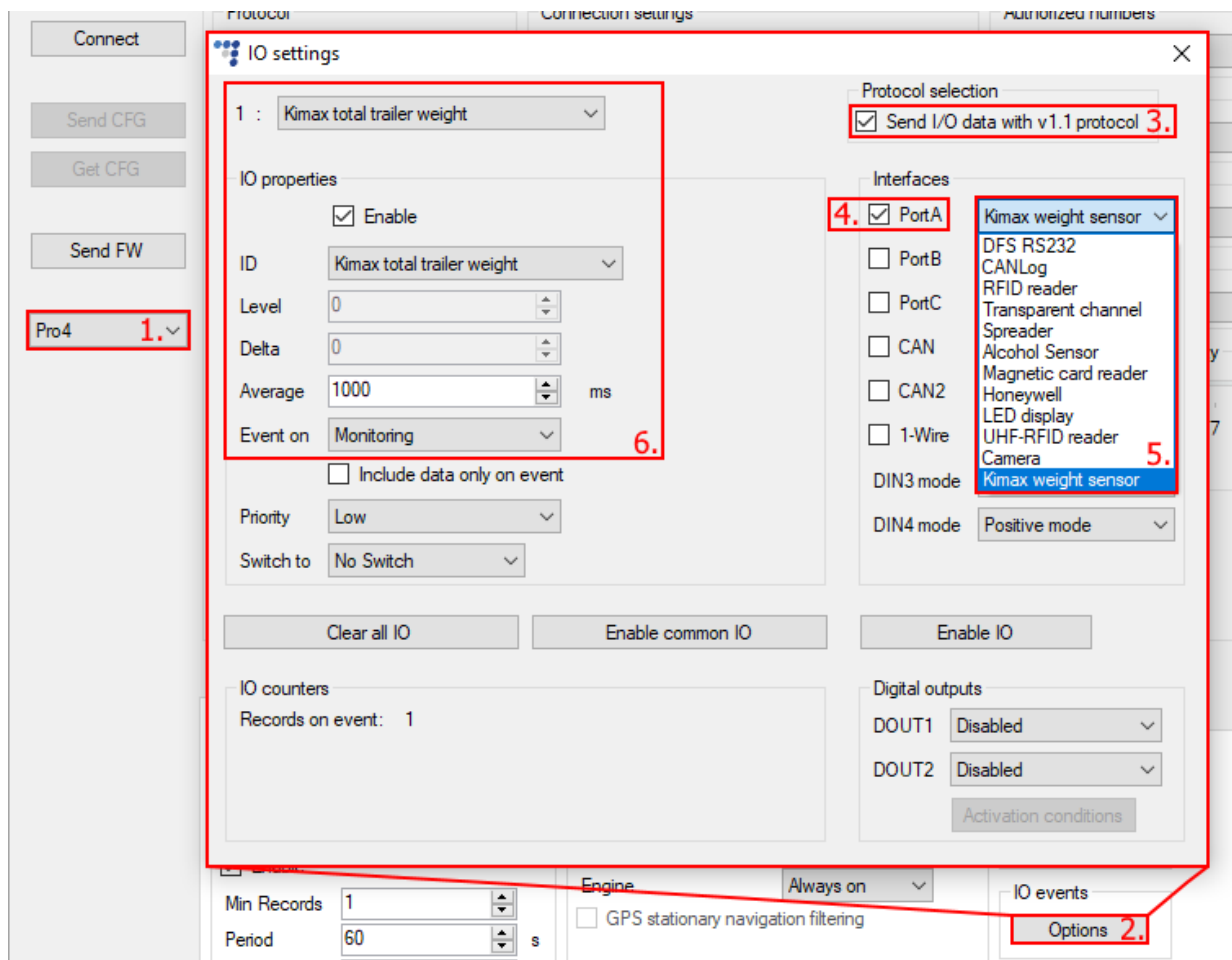
FM device	Weight sensor
Red – 12/24 V DC	Black – Power supply
Black – Ground	Brown – Ground
Orange – PortB-232 TX	Orange – TX

Configuration

In order for the weight sensor to work with the FM device, follow these steps:

1. Open the FM device configurator and select *Pro4* in the drop-down list.
2. Click on the **Options** button in the **IO events** section. The **IO settings** window will open.
3. Tick the **Send I/O data with v1.1 protocol** checkbox in **Protocol Selection**.
4. In the **Interfaces** section, select the port to which you connected the weight sensor (**PortA** or **PortB**).
5. A drop-down list will appear next to the selected port. Select *Kimax weight sensor* in the drop-down list.
6. Configure the needed IO events (described below).

Close the **IO settings** window and send the configuration to the device.



IO events

The following IO event must be configured to send trailer weight data to the server:

Event name	Monitoring	On Change	Hysteresis	IO factor
Kimax total trailer weight	Yes	No	Yes	0.1 tonnes/bit

The following IO event must be configured to send truck weight data to the server:

Event name	Monitoring	On Change	Hysteresis	IO factor
Kimax total truck weight	Yes	No	Yes	0.1 tonnes/bit

You can automatically enable both events by using the **Enable IO** functionality if *Kimax weight sensor* is configured. The events are then configured as follows:

- Event on – *Monitoring*
- Priority – *Low*