

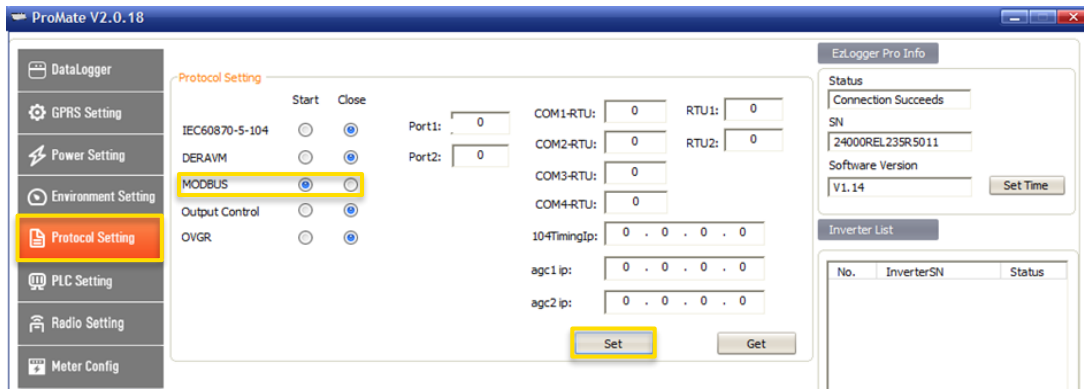
Set-up guide for IMT Modbus Sensors with GoodWe EZ Logger

Requirements

- ➔ Sensor connected to COM4
- ➔ Different Modbus addresses for each sensor when connected to the same bus, but same Data Format
- ➔ Sensor with Firmware version 1.53 or greater

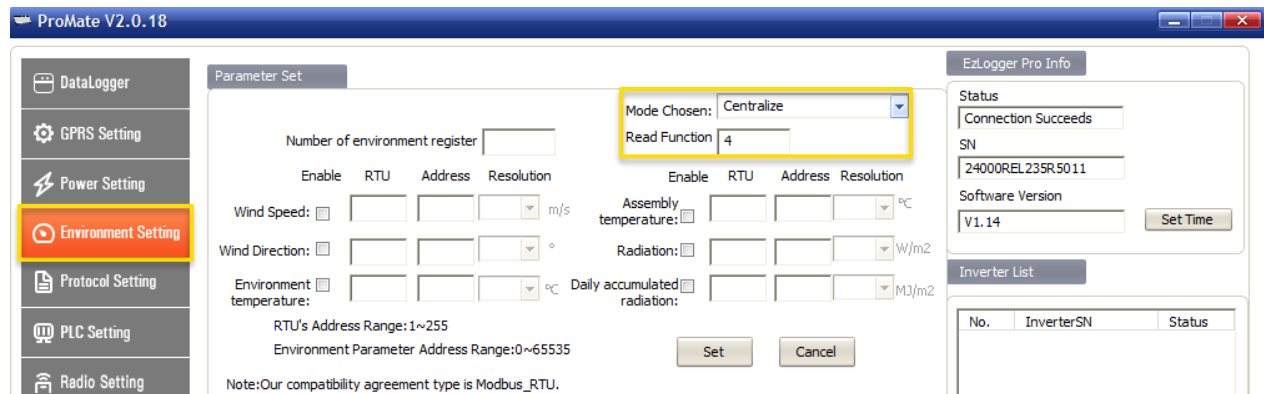
Protocol Setting

Navigate to “**Protocol Setting**” click “**Start**” next to the Modbus Protocol and hit **Set**.



Environment Setting

Under the “**Environment Setting**” tab, you can configure the Modbus Input registers according to the connected sensor type. Choose Mode “**Centralize**” and Read Function “**4**” for all sensor types.



Individual set-up for sensors

Change the following data according to the sensor type connected, whereas the signal address has to be understood as Modbus register and "RTU" as Modbus ID, click "Set" after all entries are made:

The cell temperature is a roughly approximation for the PV module temperature when using signal address 7.



Si-RS485TC-T-MB

PV module temperature ≈ Cell temperature

Parameter Set

Mode Chosen: Centralize

Read Function: 4

Number of environment register: 2

	Enable	RTU	Address	Resolution	
Wind Speed:	<input type="checkbox"/>				m/s
Wind Direction:	<input type="checkbox"/>				°
Environment temperature:	<input type="checkbox"/>				°C

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

	Enable	RTU	Address	Resolution	
Assembly temperature:	<input checked="" type="checkbox"/>	8	7	0.1	°C
Radiation:	<input checked="" type="checkbox"/>	8	0	1	W/m2
Daily accumulated radiation:	<input type="checkbox"/>				MJ/m2

Set Cancel



Si-RS485TC-2T-MB

PV module temperature ≈ Cell temperature

Parameter Set

Mode Chosen: Centralize

Read Function: 4

Number of environment register: 3

	Enable	RTU	Address	Resolution	
Wind Speed:	<input type="checkbox"/>				m/s
Wind Direction:	<input type="checkbox"/>				°
Environment temperature:	<input checked="" type="checkbox"/>	8	8	0.1	°C

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

	Enable	RTU	Address	Resolution	
Assembly temperature:	<input checked="" type="checkbox"/>	8	7	0.1	°C
Radiation:	<input checked="" type="checkbox"/>	8	0	1	W/m2
Daily accumulated radiation:	<input type="checkbox"/>				MJ/m2

Set Cancel

Si-RS485TC-T-Tm-MB



Parameter Set

Mode Chosen: Centralize

Read Function: 4

Number of environment register: 2

	Enable	RTU	Address	Resolution	
Wind Speed:	<input type="checkbox"/>				m/s
Wind Direction:	<input type="checkbox"/>				°
Environment temperature:	<input type="checkbox"/>				°C
Daily accumulated radiation:	<input type="checkbox"/>				MJ/m2

	Enable	RTU	Address	Resolution	
Assembly temperature:	<input checked="" type="checkbox"/>	8	8	0.1	°C
Radiation:	<input checked="" type="checkbox"/>	8	0	1	W/m2

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

Si-RS485TC-2T-v-MB + Tamb-Si + Vwind-Si
PV module temperature ≈ Cell temperature



Parameter Set

Mode Chosen: Centralize

Read Function: 4

Number of environment register: 4

	Enable	RTU	Address	Resolution	
Wind Speed:	<input checked="" type="checkbox"/>	8	3	0.1	m/s
Wind Direction:	<input type="checkbox"/>				°
Environment temperature:	<input checked="" type="checkbox"/>	8	8	0.1	°C
Daily accumulated radiation:	<input type="checkbox"/>				MJ/m2

	Enable	RTU	Address	Resolution	
Assembly temperature:	<input checked="" type="checkbox"/>	8	7	0.1	°C
Radiation:	<input checked="" type="checkbox"/>	8	0	1	W/m2

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

Si-RS485TC-2T-v-MB + Tmodul-Si + Vwind-Si



Parameter Set

Mode Chosen: Centralize
Read Function: 4

Number of environment register: 4

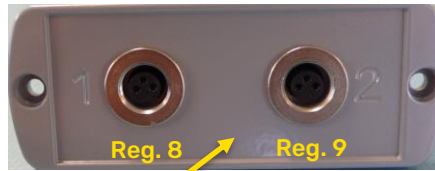
Enable	RTU	Address	Resolution
<input checked="" type="checkbox"/>	8	3	0.1 m/s
<input type="checkbox"/>			
<input checked="" type="checkbox"/>	8	8	0.1 °C
<input type="checkbox"/>			

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

Si-RS485TC-3T-MB



For Tmodul-Si connected to socket 1 and Tamb-Si connected to socket 2:

Parameter Set

Mode Chosen: Centralize
Read Function: 4

Number of environment register: 3

Enable	RTU	Address	Resolution
<input type="checkbox"/>			
<input checked="" type="checkbox"/>	8	9	0.1 °C
<input type="checkbox"/>			

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

For Tmodul-Si connected to socket 2 and Tamb-Si connected to socket 1:

Parameter Set

Mode Chosen: Centralize
Read Function: 4

Number of environment register: 3

Enable	RTU	Address	Resolution
<input checked="" type="checkbox"/>	8	8	0.1 °C
<input type="checkbox"/>			
<input checked="" type="checkbox"/>	8	9	0.1 °C
<input type="checkbox"/>			

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

Ta-ext-RS485-MB



Parameter Set

Mode Chosen: Centralize
Read Function: 4

Number of environment register: 1

	Enable	RTU	Address	Resolution	Unit
Wind Speed:	<input type="checkbox"/>				m/s
Wind Direction:	<input type="checkbox"/>				°
Environment temperature:	<input checked="" type="checkbox"/>	8	8	0.1	°C
Assembly temperature:	<input type="checkbox"/>				°C
Radiation:	<input type="checkbox"/>				W/m ²
Daily accumulated radiation:	<input type="checkbox"/>				MJ/m ²

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

Tm-RS485-MB



Parameter Set

Mode Chosen: Centralize
Read Function: 4

Number of environment register: 1

	Enable	RTU	Address	Resolution	Unit
Wind Speed:	<input type="checkbox"/>				m/s
Wind Direction:	<input type="checkbox"/>				°
Environment temperature:	<input type="checkbox"/>				°C
Assembly temperature:	<input checked="" type="checkbox"/>	8	7	0.1	°C
Radiation:	<input type="checkbox"/>				W/m ²
Daily accumulated radiation:	<input type="checkbox"/>				MJ/m ²

RTU's Address Range: 1~255
Environment Parameter Address Range: 0~65535

Note: Our compatibility agreement type is Modbus_RTU.

Set Cancel

Test communication with the sensor by clicking on **“Read”**. Measurements will appear on the Real Time Data box.

Meter Config

Real Time Data

Wind Speed:	0.0	m/s	Assembly temperature:	25.2	°C	Wind Direction:	0	°
Radiation:	20.7	W/m ²	Environment temperature:	0.0	°C	Daily accumulated radiation:	1.377	MJ/m ²

Read

Intelligent Measurement & Testing