

Connect Janitza UMG 103-CBM power meter to SmartLogger3000



Huawei Technologies Co. Ltd.

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Background:

The SmartLogger3000 can be connected to and manage multiple power meter that supports the Modbus-RTU.

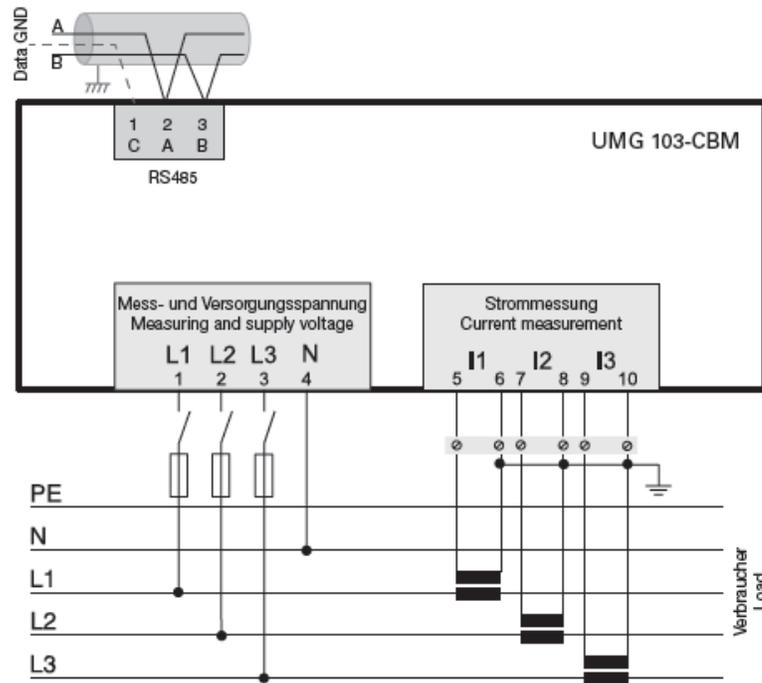
The SmartLogger3000 can be connected to and manage multiple power meters that support the DL/T645 protocol.

When there are strong electromagnetic disturbances, which may affect communication, a shielded cable (with two twisted signal conductors) should be used. The terminal resistances ($RT=120...150\Omega$) must be installed on the converter side and on the last instrument connected along the line. Thanks to these resistances, the reflected signal along the line is reduced. However, in case of short distances (max 100 m) or low communication speed (bps) there is no need of resistances.

1. Connect Janitza UMG 103-CBM with Smartlogger3000

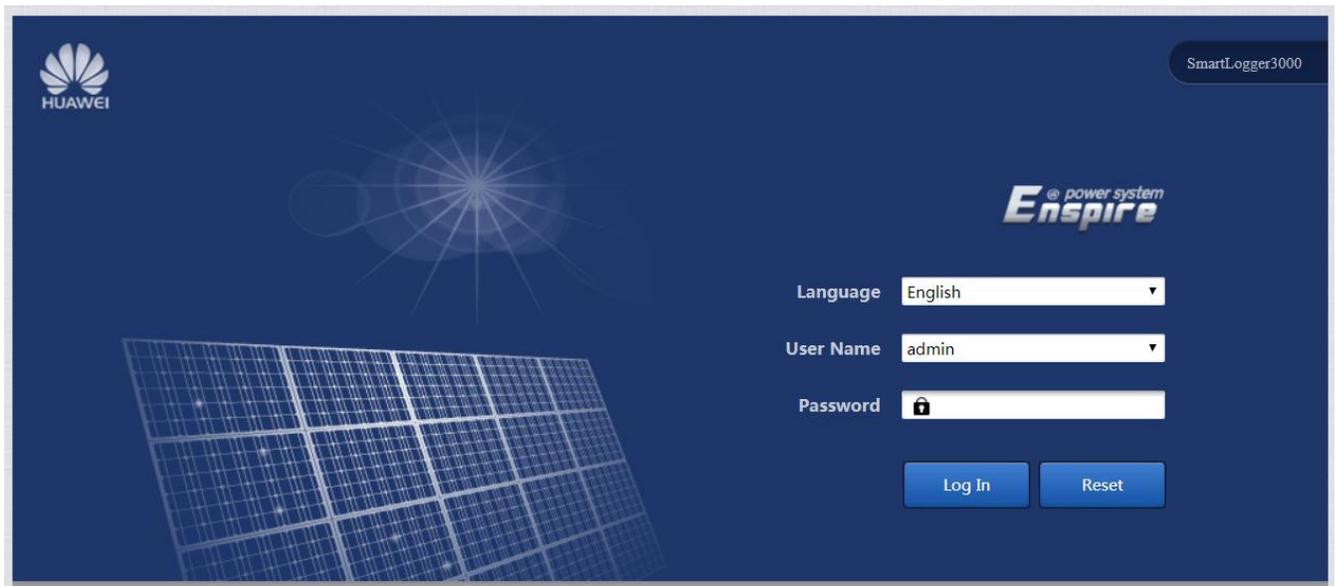


Schematic installation:



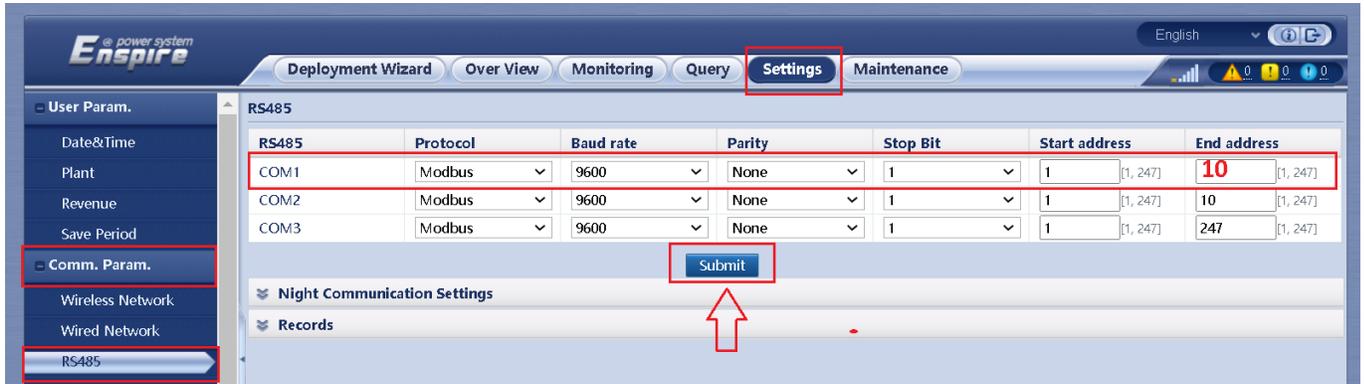
2. Configure the communication and protocol for the port

Login to the WebUI as admin:



Select the **Settings** tab → **Comm. Param.**, and choose **RS485**. On the displayed page, set **Protocol**

to **Modbus**, set the parity and baud rate accordingly with the power meter instruction and **Submit**.



The default settings for Janitza UMG 103-CBM are:

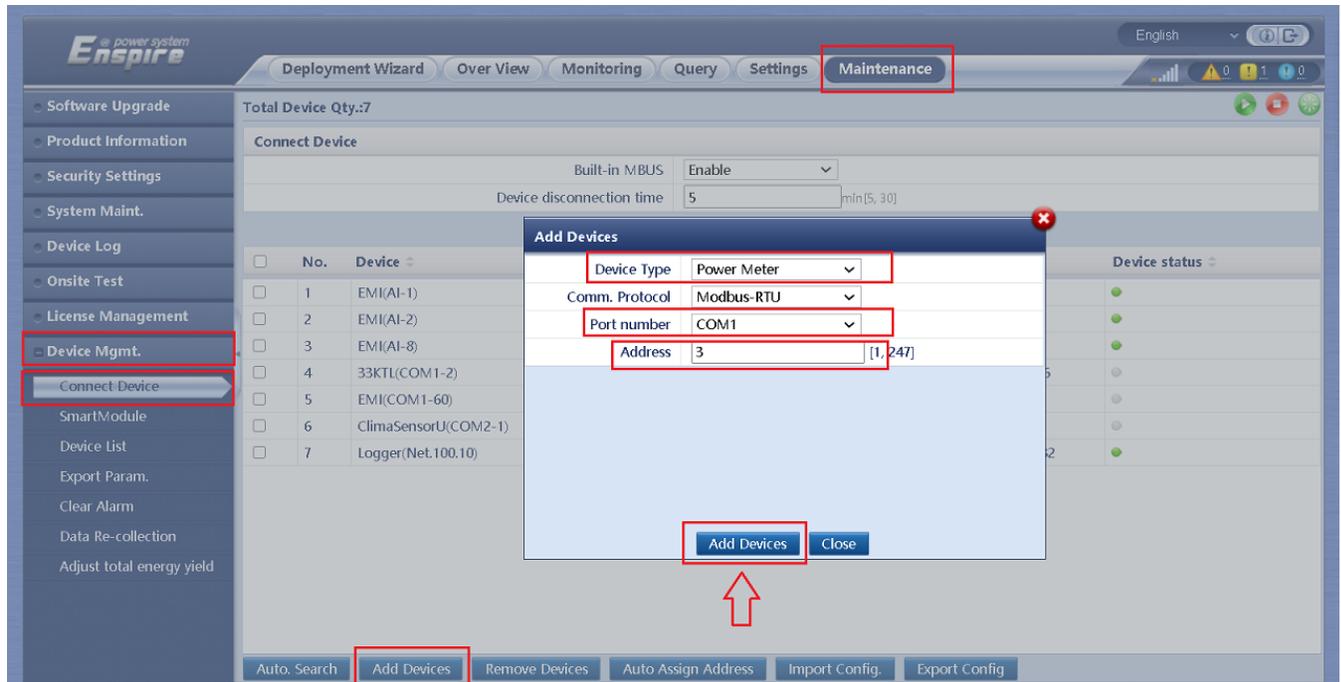
- Protocol: Modbus
- Baud rate: 9600
- Address: Set accordingly with meter instruction (check below)
- Parity: none
- Stop Bit: 1

Set the address for Janitza UMG 103-CBM: below you have an example with communication address 3 set on the meter. Set the meter communication address.



3. Adding the power meter on the WebUI

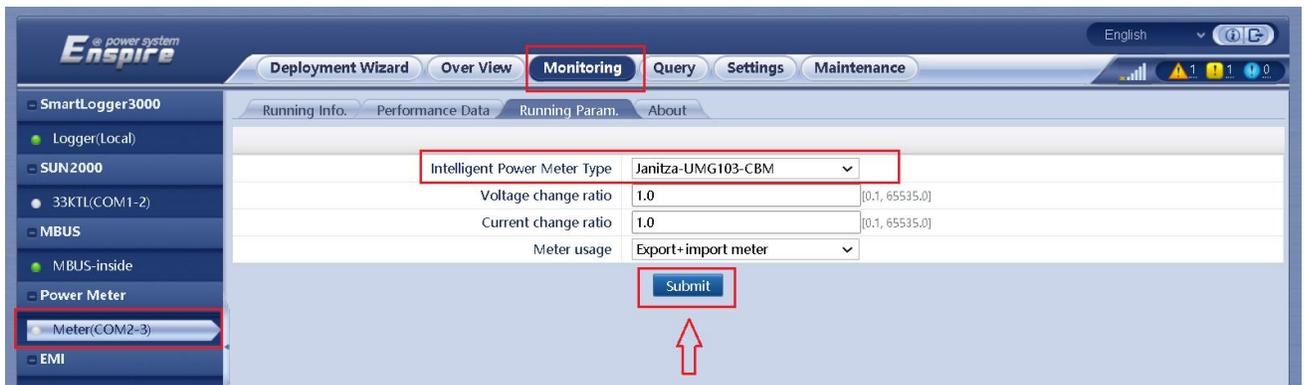
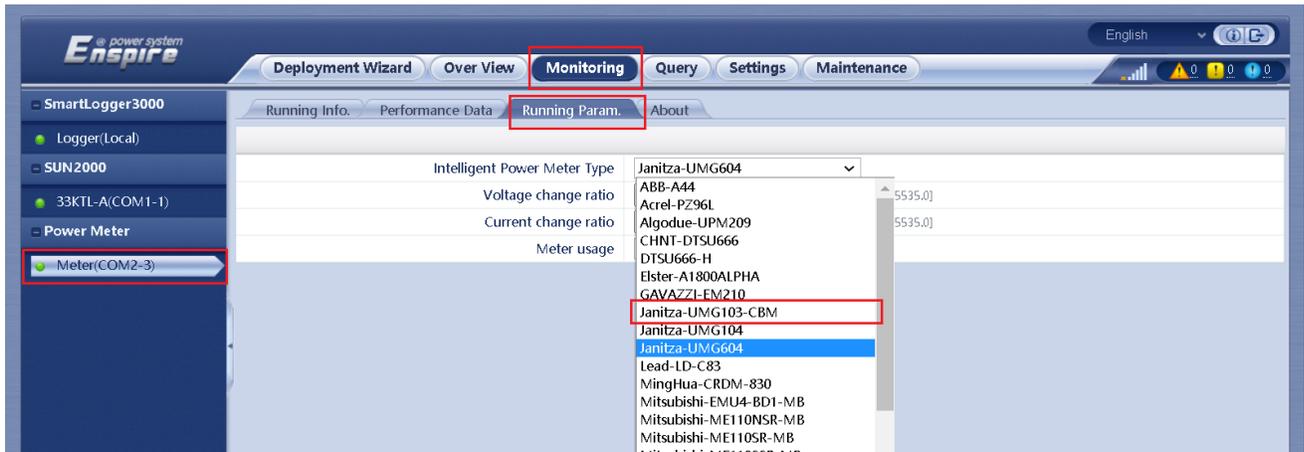
As admin click the Maintenance tab and choose **Device Mgmt.** → **Connect Device**, and click **Add Devices**. In the displayed dialog box, set Device Type to Power Meter, Comm. protocol to **Modbus RTU**, **Port number** where the meter is connected, and specify Address correctly, as shown in the following figure:



The SmartLogger3000 can connect to multiple power meters with DL/T645 and Modbus RTU protocol. Ensure that the addresses of the power meters are not duplicate.

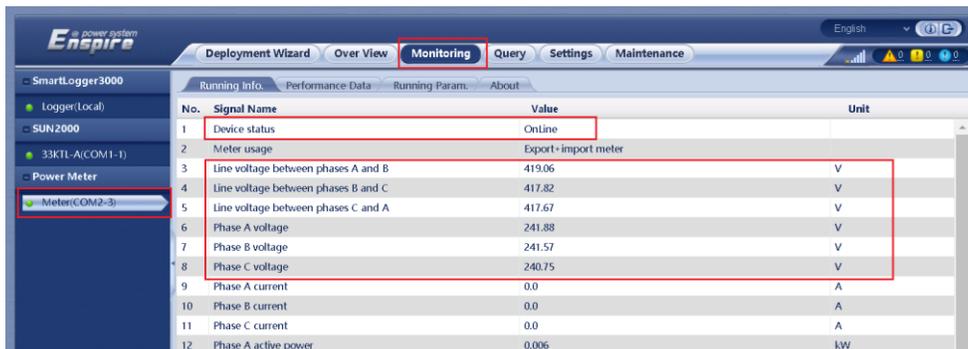
4. Setting Power Meter type

As admin choose **Monitoring** → **Select Power Meter** → **Running Param.**, select the power meter type **Janitza UMG 103-CBM** and **Submit**:



5. Querying device running information

From **Monitoring** menu select the **Power Meter** and check the device status and the value that the meter reading are correct:



No.	Signal Name	Value	Unit
1	Device status	Online	
2	Meter usage	Export+import meter	
3	Line voltage between phases A and B	419.06	V
4	Line voltage between phases B and C	417.82	V
5	Line voltage between phases C and A	417.67	V
6	Phase A voltage	241.88	V
7	Phase B voltage	241.57	V
8	Phase C voltage	240.75	V
9	Phase A current	0.0	A
10	Phase B current	0.0	A
11	Phase C current	0.0	A
12	Phase A active power	0.006	kW

Huawei Enterprise Technical Assistant Center will assist you 24x7

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