

Connect Janitza UMG 103-CBM power meter to SmartLogger3000



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Background:

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

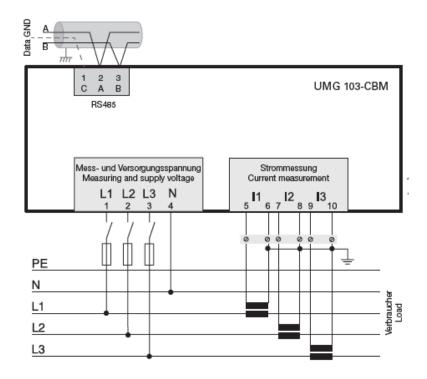
The SmartLogger3000 can be connected to and manage multiple power meters that support the DL/T645 protocol.

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 Ω) 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:

\$16 1		SmartLogger3000
HŪAWĒI		
	Enspire	
Language	English 🔻	
User Name	admin 🔻	
Password	Ô	
	Log In Reset	

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



Enspire	Deploym	ent Wizard Over	View	Monitorir	ng Que	ry Settin	igs M	aintenance				II 🔼	<u><u></u> 0 (</u>
User Param.	RS485												
Date&Time	RS485	Protocol		Baud rate		Parity		Stop Bit		Start a	ddress	End add	ress
Plant	COM1	Modbus	~	9600	~	None	~	1	~	1	[1, 247]	10	[1, 247
Revenue	COM2	Modbus	~	9600	~	None	~	1	~	1	[1, 247]	10	[1, 247
Save Period	COM3	Modbus	~	9600	~	None	~	1	~	1	[1, 247]	247	[1, 247
Comm. Param.					Su	bmit							
Wireless Network	🗧 😺 Night Com	munication Settings											
Wired Network	🗧 😂 Records					i è							

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.** \rightarrow **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:

E nspire		Deployn	nent Wizard Over View	Monitoring	Query Setting	gs Maintenance			
Software Upgrade	Total	Device Q	ty.:7					ی 🖸 🔇	
• Product Information	Con	Connect Device							
 Security Settings 				Built-in MBUS	Enable	~			
 System Maint. 			Devic	e disconnection time	5	min [5, 30]			
Device Log				Add Devices					
		No.	Device 🗘	Device Type	Power Meter	~		Device status 🗢	
 Onsite Test 		1	EMI(AI-1)	Comm. Protocol	Modbus-RTU	~		•	
License Management		2	EMI(AI-2)	Port number	COM1	~		•	
– Device Mgmt.		3	EMI(AI-8)	Address	3	[1, 247]		•	
Connect Device		4	33KTL(COM1-2)				5	0	
SmartModule		5	EMI(COM1-60)					0	
Device List		6	ClimaSensorU(COM2-1)				-	0	
Export Param.		7	Logger(Net.100.10)				2	•	
Clear Alarm									
Data Re-collection									
					Add Devices	Close			
Adjust total energy yield									
					11				
	Auto	o. Search	Add Devices Remov	re Devices 🛛 Auto As	sign Address	mport Config. 🛛 Export	Config		

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:



Enspire	Deployment Wizard Over View Monitoring	Query Settings Mai	ntenance	English	
SmartLogger3000	Running Info. Performance Data Running Param.	About			
Logger(Local)					
SUN2000	Intelligent Power Meter Type	Janitza-UMG604	~		
33KTL-A(COM1-1)	Voltage change ratio	ABB-A44 Acrel-PZ96L	5 535.0]		
Power Meter	Current change ratio	Algodue-UPM209	5535.0]		
	Meter usage	CHNT-DTSU666 DTSU666-H			
Meter(COM2-3)		Elster-A1800ALPHA			
		GAVAZZI-EM210			
		Janitza-UMG103-CBM Janitza-UMG104			
		Janitza-UMG604			
		Lead-LD-C83			
	2	MingHua-CRDM-830			
		Mitsubishi-EMU4-BD1-MB Mitsubishi-ME110NSR-MB			
		Mitsubishi-METTONSR-MB Mitsubishi-METTOSR-MB			
		Mitabili METIOSCI MD			

Enspire	Deployment Wizard Over View Monitoring	Query Settings Maint	English V (G) []- enance
SmartLogger3000	Running Info. Performance Data Running Param.	About	
Logger(Local)			
■ SUN2000	Intelligent Power Meter Type	Janitza-UMG103-CBM 🗸	
• 33KTL(COM1-2)	Voltage change ratio	1.0	[0.1, 65535.0]
B MBUS	Current change ratio	1.0	[0.1, 65535.0]
MBUS-inside	Meter usage	Export+import meter ~	
Power Meter		Submit	
Meter(COM2-3)		$\overline{\Lambda}$	
■ EMI		۲ ۲	

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:

Enspire		Deployment Wizard Over View Monito	ring Query Settings Maintenance	English 🗸 🛈 🕞
SmartLogger3000		Running Info. 🔪 Performance Data 🎽 Running Pa	ram. About	
Logger(Local)	No.	Signal Name	Value	Unit
SUN2000	1	Device status	OnLine	
33KTL-A(COM1-1)	2	Meter usage	Export+import meter	
- Power Meter	3	Line voltage between phases A and B	419.06	V
	4	Line voltage between phases B and C	417.82	v
Meter(COM2-3)	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	А
	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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