Point Table Configuration for Adding Third-party Meter via Logger1000

1. Integrated Meter

The parameters of the meters listed in the following table have been integrated in the SUNGROW Logger1000. Please find the specific models in the following table, which are subject to change without notice.

Integrated meters with Logger1000:

Brand	Meter module
Acrel	DTSD1352
Acrei	PZ96-E3
SFERE	PD194EZ
Janitza	UMG104
(RS485 A&B is reversed to logger RS485 A&B)	UMG604
Weidmvller	EM610
(RS485 A&B is reversed to logger RS485 A&B)	EM610
*Sungrow	DTSU666
*Schneider	IEM3255
*Sungrow	DTSU666

* Available in Dec. 2020

2. Add Meter

2.1. Limitations

The meter that need to be connected to Logger1000 must support 485 communication protocol.

2.2. Login and Set Baud Rate

Step 1 Login

- 1) Enter the website address of "11.11.11.1" in the browser to enter the software address of Logger1000.
- 2) Click "Login" and then enter default password (pw1111) in the User Login dialog.

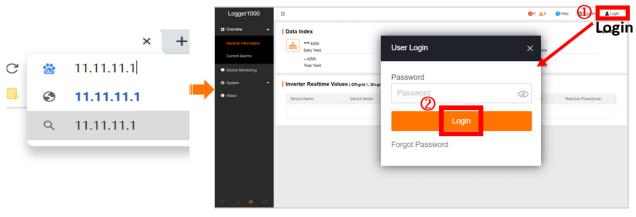


Figure 2-1 Login

Step 2 Set port parameter

The baud rate of the port (COM1/COM2/COM3) connected to the meter needs to be consistent with the baud rate of the meter (Refer to the user manual of the meter). If the meter is connected to the "Net" port, there is no need to set the baud rate.

- 1) Click "System" on the left list of the main page, and then click "Port Parameter" from the drop-down list.
- 2) Click "RS485" from the drop-down list to enter the port parameter setting interface.

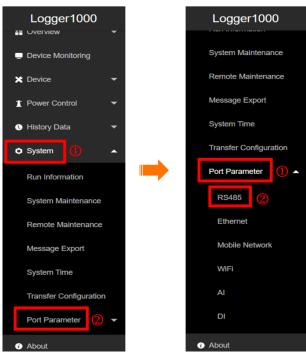


Figure 2-2 Port parameter

- 3) Click the "setting" icon of the port connected.
- 4) According to the parameters of the meter connected (Refer to the meter's user manual), select the values of baud rate, parity bit and stop bit in the pop-up window, and then click "Save".

Logger1000	=				😣 0 🛕 0 📀 Help	English	LO&M user
System Maintenance	Serial Port	Baud Rate		Parity Bit	Stop Bit	0	
Remote Maintenance	COM1	19200		Even	1		٥
	COM2	9600		None	1	/	٥
Message Export	COM3	9600	Advanced Settings		×		0
System Time							
Transfer Configuration			Serial Port COM1				
Port Parameter			Baud Rate				
			19200		· · · · ·		
RS485			Parity Bit				
Ethernet			Even		v		
Mobile Network			Stop Bit				
WiFi			1		·		
AI				2 Save			

Figure 2-3 Set baud rate

2.3. Add the Compatible Meter

Step 1 Add device

- 1) Click "Device" on the left list of the main page, then select "Device List" from the drop-down list.
- 2) Click "Add Device" on the new interface.

Logger1000	Ξ				0 0 <u>A</u> 0 <u>0</u> 1	Help 🕀 English 💄 O&M user
E Overview 👻	Shortcut Menu					
Device Monitoring	_	-				
X Device	Device Setup	Network Management	Transfer Configuration Syste	em Maintenance'		
Device List	Device List	Network Management	name congulatori ayse	nin waariich karii.ce		
Firmware Update	Data Index					Expand~
Inverter Log	kWh Daily Yield		kW Real-time Active Po		Device	
AFCI Activation	- kWh		KW		0 Piece	
Power Control	Total Yield		Max. Adjustable Ac	tive Power	Online Device	
🔹 History Data 🛛 👻	Inverter Realtime Va	lues (Off-grid 0, On-gr	id 0)			
🌣 System 👻	Device Name	Device Model	Status	Daily Yield(kWh)	Active Power(kW)	Reactive Power(kvar)
About	Donos Harro			io Data	Active Power(kitty	Postano Ponto (Kras)
				40 Data		
	1					
🛆 🖻 h. 😤						
Logger1000	■Add Devi	ce			0 0 A 0 0	Help BEnglish BO&M user
Logger1000	Add Devi	се	• • • • •		0 0 ∆ 0 0	Help
	Auto Search Add Device				Ensuring IP	Delete Da Da
# Overview 👻			Add Device			
II Overview *	Auto Search Add Device		Device Type		Ensuring IP	Delete Da Da
Device Monitoring X Device A	Auto Search Add Device		Device Type Please Select	· · ·	Ensuring IP	Delete Da Da
Overview Device Monitoring X Device Device List Firmware Update	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
Coverview Cevice Monitoring Device Monitoring Device List	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
Consider Consider Monitoring Device Monitoring Device List Finneare Update invester Log A/C1 Adveston	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
Eventree Device Monitoring Device Monitoring Device List Finneare Update inverter Log AFCI Activation Power Control Power Control	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
Even Manitoring Device Manitoring Device Manitoring Device Unit Firmure Update Inverter Log AFCI Activation Pageser Control Pageser Control e History Data e	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
Even Manitaria Device Manitaria Device Manitaria Device Unit Primare Update inverter Log AVCI Activation Power Control Power Contro Power Control P	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
Even Manitoring Device Manitoring Device Manitoring Device Unit Firmure Update Inverter Log AFCI Activation Pageser Control Pageser Control e History Data e	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
E Oversteer Oversteer Devise Maintaining Devise Maintaining Devise Unit Primage Update Inventer Log AFCE Activation Filmany Control Power Control P	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da
E Oversteer Oversteer Devise Maintaining Devise Maintaining Devise Unit Primage Update Inventer Log AFCE Activation Filmany Control Power Control P	Auto Search Add Device		Device Type Please Select		Ensuring IP	Delete Da Da

Figure 2-4 Login and add device

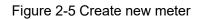
Step 2 Create new meter to be added

- 1) In the pop-up window, select "Meter" option in the "Device Type".
- Select the port (COM1/COM2/COM3/NET) that the meter is actually connected to in the "Port".
- 3) Select the corresponding meter module in the "Device Model".
- 4) Enter the value of "Beginning Address" and the "Quantity of Device".

Note

Be aware of the number of device added in each port. When there are any devices existed in the Device List, the "Beginning Address" to be entered should bigger than the device address existed if they are in the same port.

Add Device	×									
Device Type										
Meter	~									
Port		Ξ					Device	0 0 <u>A</u> 0 (Holp @Engl	ish 🚊 O&M u
		Aven Search Ant	Device				Address			Delete 🕞
COM1	~	No.	SN	Device Name	Device Model	Port o	Device Address ©	Forwarding IP	Com Status	Operation
		1		EM810(COM1-001)	EM610	сом1		1	83	¢ +
Device Model					-	_				
PD194EZ	~									
Beginning Address (1~255)										
1										
Device Quantity (1~30)										
1										
Save										



5) Click "Save".

2.4. Add the Third-party Meter

2.4.1. Custom Configuration Method

Step 1 Add device

Refer to PART 2.3. Step 1

Step 2 Create new meter to be added

- 1) In the pop-up window, select "Meter" option in the "Device Type".
- 2) Select the port (COM1/COM2/COM3/NET) that the meter is actually connected to in the "Port".
- 3) Select "Others" option in the "Device Model".
- 4) Select "Custom" option in the "Configuration method".

Add Device		×
Device Type Meter	Please Sel	ect Port
Port	COM1	
COM1	COM2	
Device Model	COM3	
Others		
Configuration method	Select Type	
Custom	Custom	
	Next	

Figure 2-6 Create new meter with custom configuration method

- Step 3 Create Point Table template.
 - 1) Enter or select corresponding value of parameters in the pop-up window.

			PT Transformation F	Ratio		CT Transformation Ratio					
Big-endia	n for byte	;data, big-endia 💌	1 , ,			1					
Beginning	Address		Quantity of Device								
1			1								
	Measurement Point	Modbus Address 🗢	Register type	Data Type	Read type	Coefficient	Read-back Value	Unit			
No.	Name										
✓ No.		3028	0x3 -	FLOAT 👻	continuous	1.0		V			

Figure 2-7 Parameter setting

Note

The user can select up to 21 objects for setting. Their corresponding parameters such as Modbus address please refer to the user manual of the connected meter.

Parameter Description

Byte Order	Refer to the communication protocol of the meter, parse the order of the read byte stream
PT Transformation Ratio	Refer to the communication protocol of the meter, voltage transformation ratio
CT Transformation Ratio	Refer to the communication protocol of the meter, current transformation ratio
Beginning Address	The beginning address of the device
Quantity of Device	The number of the meter
Debug Address	The device address to be read when click "Read-Back", the range is [("Beginning Address"), ("Beginning Address" + "Quantity of Device"-1)]
Modbus Address	Refer to the communication protocol of the meter, the address of Modbus communication protocol, priority to select the register address corresponding to the data type of "Float"
Register Type	Refer to the communication protocol of the meter, the register type of the corresponding measuring point
Data Type	Refer to the communication protocol of the meter, the data type of the corresponding measuring point
Read Type	With or without framing when send messages at this point, recommend to choose continuous type
Coefficient	Refer to the communication protocol of the meter, the coefficient that multiplied the value of the data read
Read-back Value	The value of the selected measuring point read when clicking "Read-back"

2) Select the points to be measured, click "Read-back" to read the information from the meter in real time to check the correctness of parameter setting.

	ıg addr					Rea	ad-back	Read-back Save Template	4
2	No.	Measurement Point	Modbus Address 💠	Register type	Data Type	Read type	Coefficient	Read-back Value	Unit
2	1	Phase A Voltage	3028	0x3 ~	FLOAT 👻	continuous 👻	1.0		V
2	2	Phase B Voltage	3030	0x3 · 👻	FLOAT	continuous	1.0		V v
2	3	Phase C Voltage	3032	0x3 , 👻	FLOAT, -	continuous 🔍	1.0 , ,		V
2	4	A-B Line Voltage	3020	0x3 -	FLOAT -	continuous 👻	1.0		V
2	5	B-C Line Voltage	3022	0x3 -	FLOAT -	continuous · · · ·	1.0		V ·
7	6	C-A Line Voltage	3024	0x3 -	FLOAT .	continuous v	1.0		V

Figure 2-8 Read-back parameter value

Note

Only when the "Read-back Value" is consistent with the displayed value of the electric meter, the parameter setting of the measuring point is correct.

3) When the "Read-back Value" is consistent with the displayed value of the electric meter, click "Save Template" to save the measuring point setting of this/these meter(s) as a template.

	g addr	ess 1								Save Tem	Rear back Save Template	₽ ₿
	No.	Measurement Point	Modbus Address \$	Register type		Data Type		Read type		Coefficient	Read-back Value	Unit
2	1	Phase A Voltage	3028	0x3	~	FLOAT	~	continuous	T	1.0	225.71	v
3	2	Phase B Voltage	3030	0x3 ·	~	FLOAT	₩,	continuous		1.0	113.00	V -
3	3	Phase C Voltage	3032	0x3	▼.	FLOAT	*	continuous	*	1.0	112,96	V
2	4	A-B Line Voltage	3020	0x3	•	FLOAT	•	continuous		1.0	112.71	V
3	5	B-C Line Voltage	3022	0x3	Ŧ	FLOAT	₩.	continuous		1.0	0.00	V V
2	6	C-A Line Voltage	3024	0x3	-	FLOAT		continuous	₹,	1.0	112.75	v

Figure 2-9 Check correctness

4) Enter the template name in the pop-up prompt window and click "Confirm" on the prompt window to save the template. Click "Confirm" on the measuring point configuring window to add the device and save the setting.

Configu	ire Mea	asuring Point			×
Debu	ıg addr	ess 1	Prompt ×	Read-back Save Template	° ⊡
	No.	Measure Name		Read-back Value	Unit
	1	Phase A	Template Name	225.71	v
	2	Phase B	TEST01	113.00	V
	3	Phase C	The model name should be a combination of numbers, letters, dashes and underscore s starting with English letters, with a maximum length of 32 bits It will be selected in the configuration file after saving	112,96	V
	4	A-B Line	0	112.71	V
	5	B-C Line	Confirm	0.00	V
	6	C-A Line		2	v .
				Bac	Confirm

Figure 2-10 Template name

Note

The template name should be a combination of numbers, letters, dashes and underscores starting with English letters, with a maximum length of 32 bits.

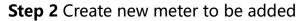
2.4.2 Import Files Method

Step 1 Login and add device

1) Click "Add Device" to add new meter in the Device List interface.

Logger1000	Add Device					0 0 🛕 0	Help	h 💄 O&M user
Overview -	Auto Search Add Device							Delete
Device Monitoring	No. SN	Device Name	Device Model	Port ¢	Device Address ©	Forwarding IP	Com Status	Operation
X Device	□ 1	EM610(COM1-001)	EM610	COM1	Address ©	¢ 1	<u>s</u>	0+
Device List		Lino to (Gonini-Gony	Enterte	COMIT			×0	•••
Firmware Update		Add Device			×			
Inverter Log		Device Type						
AFCI Activation		Please Select '			· •			
Power Control			Save					
History Data								
• System -								
 About 								
ê e		1.1						

Figure 2-11 Add device



1) Select "Meter" option in the "Device Type".

- 2) Select the port (COM1/COM2/COM3/NET) that the meter is actually connected to in the "Port".
- 3) Select "Others" option in the "Device Model".
- 4) Select "Import Files" option in the "Configuration method".

Add Device ×								
Port	•							
COM1	b							
	-				Device	0 0 <u>A</u> 0 (Help 🕀 Engli	ish 💄 O&M user
Device Model	Auto Search Add	evice		Port				Delete
Others	NO.	SN	Device Name	Device Model Port ¢	Device Address ©	Forwarding IP	Com Status	Operation
	1		EM610(COM1-001)	EM610 COM1	1	1	\$3	0 7
Configuration method								
Import Files								
Configuration File								
Configuration File	•							
18_TEST01.xm	•							
Beginning Address (1-255)								
2								
Quantity of Device								
2	-							

Figure 2-12 Import measuring point template

- 5) Select the corresponding measuring point template in the "Configuration File".
- 6) Enter the value of "Beginning Address" and the "Quantity of Device".

Note

Be aware of the number of device added in each port, the "Beginning Address" to be entered should bigger than the device address existed if they are in the same port.

7) Click "Save".

3. Configure the Meter Added

3.1. Edit the Measuring Point template

- Step 1 Login and configure measuring point
 - 1) Click "Login" and then enter default password (pw1111) in the User Login dialog.

- 2) Click "Device" on the left list, then select "Device List" from the drop-down list.
- 3) Click the "tool" icon of the device of which the measuring point settings to be changed.

	•	A	uto Search Add Devi	ce								Delete
Device Monitoring			No.	SN	Device Name	Dev	ice Model	Port \$	Device Address \$	Forwarding IP	Com Status	Operation
Device	^		1		EM610(COM1-001)	EM	10	COM1	1	1	\$3	0 🕂
Device List			2		EM610(COM1-002)	EM	10	COM1	2	2	\$3	0 +
Firmware Update	Configu	ure Mea	suring Point								×	0 +
Inverter Log		order	for byte	ordata &nbsorbio-endia 👻							i	
AFCI Activation				, ann a shi a shi a sha a								
Power Control										Read-back Save Temp	slate 🕞	
History Data		No.	Measurement Point	Modbus Address 💠	Register type	Data Type	Read type		Coefficient	Read-back Value	Unit	
System		1	Phase A Voltage	3028	0x3 ~	FLOAT ~	continuo	us 👻	1.0	227.50	v	
About		2	Phase B Voltage	3030	0x3 ~	FLOAT ~	continuo	us –	1.0	113.84	v	
		3	Phase C Voltage	3032	0x3 ~	FLOAT ~	continuo	us, ••,	1.0	113.86	V , .	
			A-B Line Voltage	3020	0x3	FLOAT -	continuo	us -	1.0	113.66	v	

Figure 3-1 Configure measuring point

Step 2 Edit the measuring point parameters and create new template

1) Configure the parameters and then click "Save Template".

Configu	ure Mea	asuring Point			×
	order	n for byte data, big-end	ian for word data		ŕ
ыў	-endiar	i lor byte data, big-end	ian iol word data 🔍	0	
				Read-back Save Template	•
	No.	Measurement Point Name	Prompt ×	Read-back Value	Unit
	1	Phase A Voltage	Template Name	230	V
	2	Phase B Voltage	TEST02		V
	3	Phase C Voltage	It will be selected in the configuration file after saving		v
			Confirm Cancel	3 Back	Confirm

Figure 3-2 Save and apply the new template

2) Enter the template name in the pop-up prompt window and click "Confirm" on the prompt window to save as a new template.

3) Click "Confirm" on the measuring point configuring window to apply the new template on the all devices that used this template before.

Note

The new template name should be different from the name of the old template just modified.

3.2. Delete the Meter Added

Select the device to be delete and then click "Delete" on the Device List interface.

	No.	SN	Device Name	Device Model	Port 🌻	Device Address \$	Forwardin g IP	Com Status	Operati on
2	1		EM610(COM1-001)	EM610	COM1	1	1	\$3	•
2	2		EM610(COM1-002)	EM610	COM1	2	2	\$3	0+
	3		EM610(COM1-003)	EM610	COM1	3	3	\$3	• +
	4		EM610(COM2-004)	EM610	COM2	4	4	\$3	O +

Figure 3-3 Delete the meter added