

Data Logger FAQ

How to connect an Energy meter to Logger1000

Applicable to: Logger1000

1. Log in to the Web interface of Logger 1000

WiFi-login

Logger1000 supports WiFi-login. After the device is powered, check the SN code on the device and select the WiFi hotspot signal named SG-XXXX (XXXX is the device SN) to connect to WiFi.

AS ANTECHNER ASIAS		~
无线网络连接	^	
HUAWEI Mate 20	已连接,则	
sungrow	llee	h
Xiaomi8	· III.	=
SG-A1906160009		
mi		
thermal1	1000	
SG-LIWEI247	5.01	
SG-LOGGGGGGER	5.01	
Yf_iPhone	100	
colin		-
CD6B	读中心	
	🙂 🍨 📟 🐁 👕	

Enter the default IP address of Logger 1000 in the browser address bar after the device is connected: 11.11.11.1 to open the device management interface, the initial password is pw1111.



Ethernet login

Logger 1000 also supports Ethernet login. The default IP address of Logger 1000 is 12.12.12. First, after the device is powered, use the network cable to connect it with the computer, and change the IP address of the computer to make it in the same network segment as the device, as shown in the following figure.

SUNGROW Connected			^
		Edit IP settings	
Network profile type		Manual ~	
O Public (Recommended) Your device is not discoverable	e on the network. Use this in most cases—	IDv/	place.
O Private Your device is discoverable on	the network. Select this if you need file sh	On On	should know and trust the
people and devices on the net	work.	IP address	
Configure firewall and security	settings	12.12.12.9	
Authentication settings		Subnet mask	Edit
Metered connection Some apps might work differently t	o reduce data usage when you're connect	255.255.255.0	Off
Cot o data limit to hole control	data usana an this patural.	Gateway	
Set a data limit to help control	data usage on this network	12.12.12.254 ×	
IP assignment:	Automatic (DHCP)	Preferred DNS	Edit
DNS server assignment:	Automatic (DHCP)		Edit
Link speed (Deseive/Transmit):	1000/1000 (Mhac)	Preferred DNS encryption	
Link-local IPv6 address:	fe80::a8d2:6d33:8b63:aa6d%11	Unencrypted only ~	Сору
IPv4 address:	10.20.81.17		
IPv4 DNS servers:	10.20.81.244 (Unencrypted)	Alternative DNS	
Manufacturer:	DisplayLink		
Driver version:	9.3.3309.0		
Physical address (MAC):	A0-29-19-CF-35-07	Save Cancel	



Enter the default IP address of Logger 1000 in the browser address bar after the device is connected: 12.12.12.12 to open the device management interface, and the initial password is pw1111. After logging in, the main interface of Logger1000 is shown in the following figure.

Logger1000	Ξ					⊗0 🛕0 @English	L O&M User
Overview	Shortcut Menu						
General Information	1	k					
Gurrent Alarms	Setup Wizard	System Maintenance					
Device Monitoring							
X Device 👻	Data Index						Expand~
1 Power Control 🔹	kWh		kW				
History Data	kWh		kW		0 Piece		
♦ System ►	Total Yield		Max. Adjustable Active Power		Online Device		
About	Inverter Real-time Values (or	ff-grid 1, On-grid 0)					
	Device Name	Device Model	Status	Daily Yield(KWh)	Active Power(KW)	Reactive Power(kvar)	
	SG50CX(COM1-001)	SG50CX	Offline	-			



2. Add energy meter

- 2.1 When adding an energy meter, please pay attention to the parameter settings such as the baud rate of RS485 terminal of data collector and the calibration, which should be consistent with the energy meter.
- 2.2 Pay attention to the connection mode of CT and PT when installing the energy meter. Whether the CT is installed in the correct direction can be judged by power. If the active power of the energy meter is positive, it means taking electricity from the power grid, and if the active power of the energy meter is negative, it means feeding electricity to the power grid.

2.3 Gateway meter: Shows load side information:



2.4 Electricity meter: Only shows PV-side information, and not measure loadside information:





3. Add EM610 energy meter

EM610 default communication parameters: Beginning address 1, baud rate 115200bps, data bit 8, non parity, stop bit 1.

- 3.1 Connect the energy meter and data collector correctly with RS485 communication line. The data collector has three RS485 interfaces. A1B1, A2B2 and A3B3, which correspond to COM1, COM2 and COM3 respectively. You can choose any one of them when connecting the energy meter. A in the RS485 interface of the EM610 energy meter is connected to B in the RS485 interface of the data collector, and B in the RS485 interface of the EM610 energy meter of the data collector.
- Logger1000

 Concert

 Concert

 Concert

 No

 No</td
- 3.2 To add energy meter, click: Device -> Device List -> Add Device.



4. Add UMG604 energy meter

4.1 The UMG604 energy meter is connected to the data collector with a network cable in two ways:

A: Connect the energy meter and data collector directly with the network cable.

B: Transfer through the router. First connect the energy meter to the router with a network cable, then connect the data collector to the router with another network cable.

4.2 To add energy meter, click: Device -> Device List -> Add Device.

Logger1000	Ξ						0 0 <u>A</u> 0	English & O&M User
Cverview 👻	Auto Search Add Device							Dente 🕞 🕃
Device Monitoring	No.	SN	Device N	Add Device ×	/ice Address ≑	Forwarding Modbus	Com Status	Operation
🗙 Device 🔺	1	A2011062912	SG50CX	Device Type 1		10 \$	\$3	0
Device List			1	Meter ~				
Firmware Update				Access Type				
Inverter Log				Gateway Meter				
AFCI Activation				Port				
Fault Recorder				NET				
Power Control				Protocol type				
🔇 History Data 🛛 👻				MODBUS-TCF				
• System -				Peer IP Address				
 About 				<u> </u>				
				Peer Port (1-65535)				
				UMG604				
 								
							_	
Logger1000	Ξ						8 0 A 0	English & O&M User
Logger1000	TE Auto Search Add Device		_	_			0 0 A 0	Deints De Ca
Logger1000	E Ado Saach Add Device No.	SN	Device N	Add Device X Devi	ice Address ©	Forwarding Modbus	O A O	English & OdM User
Logger1000	EE Anto Granch Add Device No. 1	SN A2011062912	Device N SG50CX0	Add Device X Devi	ice Address ©	Forwarding Modbus ID ¢ 1	Com Status	Costing Costing Cost Cost Cost Cost Cost Cost Cost Cost
Logger1000 Constant of the second se	Call Sand Add Denter	SN A2011062912	Device N SG50CX	Add Device X Devi Protocol type 1	ice Address ©	Forwarding Modbus ID: 0 1	Com Status	Dents De C
Logger1000 Constraints Constr	EE Add Dance No. 1	SN A2011062912	Device N SG50CX	Add Device X Devic Protocol type 1 MOCBUS-TCP V	kce Address ≎	Forwarding Modbus ID \$ 1	Com Status	Cpention
Logger1000 Conversion	EE Add Taesch Add Dealer No. 1	SN A2011062912	Device N SG50CX0	Add Device X Device Protocol type 1 MODBUS-TCP V Peer IP Address	ice Address ©	Forwarding Modbus ID © 1	Com Status	Cperation
Logger1000 Coverview Cove	EE Add Search Add Denker No. 1	SN A2011062912	Device N SG50CX	Add Device X Devic Protocol type 1 MCCBU3-TCP V Peer IP Address Peer Port (1-65535)	ice Address ©	Ponwarding Modbus ID: © 1	Com Status	Constant
Logger1000 Coversiew Cove	EE Add Search Add Center No.	SN A2011062912	Device N SG50CX0	Add Device × Devi Protocol type 1 MCDBUS-TCP Peer IP Address Peer Pott (1-8535) 502	tor Address 🗢	Forwarding Motbus ID ©	Com Status	Constant User
Logger1000	EE Adv Search Add Dexice No. 1	SN A2011062912	Device N SG50CX	Add Devke × Devk Protocol type Poer IP Address Peer Port (1-65535) 502 Devke Model	tor Address 0	Forwarding Modbus ID © 1	Com Status	Cpention
Logger1000	EE Add Dence No. 1	SN A2011062912	Device N SG50CX	Add Device × Device Protocol type • • • • • • • • • • • • • • • • • • •	kce Address 0	Forwarding Modbus ID 9 1	Com Status	Cpention
Logger1000	E	SN A2011062912	Device N SG50CX0	Add Device X Protocol type Protocol type Peer IP Address Peer Port (1-55535) So2 Device Model UMG651 WG651 V Eegman Address (1-255)	Ke Address 0	Forwarding Modbus ID © 1	Com Status	Cpention
Logger1000	EE No. 1	SN A2011052912	Device N SG50CX0	Add Device X Devic Protocol type 1 MOCBUB-TCP V Peer IV/Address Peer View (1-45503) 502 Device Model UMC604 V Beginning Address (1-255)	KC Address 0	Forwarding Modous ID © 1	Com Status	Coperation
LLogger1000	EE	SN A2011062912	Device N SG50CX0	Add Device X Devic Protocol type 1 MOCBUS-TCP V Peer IP Address Peer Port (1-45535) 502 Device Model UMG604 V Beginning Address (1-255) Cuantity of Device (1-30) 1	ke Address 0	Forwarding Modbus ID © 1	Com Status S	Cperation
Logger1000 Coversiew Cove	E	SN A2011662912	Devce N	Add Device X Devic Protocol type MCDBUB-TCP Peer IP Address Peer Port (1-45535) 562 Device Model UMG564 Beginning Address (1-255) Cuantity of Device (1-30) 1	kor Address 0	Porwarding Modbus ID © 1	Com Status S	Coperation
Logger1000 Controller	E	SN A2011062912	Devce N SOSOCX	Add Device X Protocol type Peer Port (1-65535) So2 Device Model UMGGOJ Cuantify of Device (1-30) 1 Cuantify of Device (1-30) Cuantify of Device (1-30) Cuantify of Dev	Kce Address 0	Forwarding Modbus ID 9 1	Com Status	Cpension
Logger1000	E	SN A2011062912	Devce N SOSOCX	Add Device Protocol type Protocol type Peer IPI Address Peer Port (1-55535) So2 Device Model UMG654 Country of Device (1-50) 1 Country of Device (1-50) 2 Country of Device (1-50	Ke Address 0	Forwarding Modbus ID 9 1	Com Status S	Cpension



5. Add DTSD1352 energy meter

- 5.1 DTSD1352 default communication parameters: Default protocol Modbus_RTU, address 254, baud rate 9600bps, data bit 8, non parity, stop bit
- 5.2 Connect the RS485 line, connect the first 485 port of the energy meter to the RS485 port of data collector, correspondingly connect the energy meter with the RS485 port of the data collector, connect the A of the energy meter with the A of Logger1000, and connect the B of the energy meter with the B of Logger1000.
- 5.3 To add energy meter, click: Device -> Device List -> Add Device.

Logger1000	Ξ							0 0 <u>A</u> 0	English 🔒 O&M User
Cverview 👻	Auto Search Add Device								Delete 🕞 🕞
Device Monitoring	No.	SN	Device N	Add Device	×	Device Address ©	Forwarding Modbus	Com Status	Operation
🗙 Device 🔺	T 1	A2011062912	SG50CX	Device Type		1	1	23	0
Device List				Meter	Ŷ				
Firmware Update				Access Type					
Inverter Log				Gateway Meter					
AFCI Activation				Port					
Fault Recorder				COM2	\sim				
Power Control				Device Model					
🔮 History Data 🛛 👻				DTSD1352	~				
🗢 System 👻				Beginning Address (1~255)					
 About 				254					
				Quantity of Device (1-30)					
				1					
				Save					
A A A									



6. Add PZ96-E3 energy meter

PZ96-E3 default communication parameters: Default protocol Modbus_RTU, address 1, baud rate 9600bps, data bit 8, non parity, stop bit 1.

- 6.1 Connect the RS485 line, connect the first 485 port of the energy meter to the RS485 port of data collector, correspondingly connect the energy meter with the RS485 port of the data collector, connect the A of the energy meter with the A of Logger1000, and connect the B of the energy meter with the B of Logger1000.
- Logger1000 0 A 0 @English 2 O&M User ch Add Device Delete 🕞 🛱 Device Monitorin Add De X Device 0 Gate Port COM2 PZ96-E3 1 Quantity of Device (1~30) 1
- 6.2 To add energy meter, click: Device -> Device List -> Add Device.



7. Add custom meter

7.1 Connect the RS485 line, connect the first 485 port of the energy meter to the RS485 port of data collector, correspondingly connect the energy meter with the RS485 port of the data collector, connect the A of the energy meter with the A of Logger1000, and connect the B of the energy meter with the B of Logger1000.

7.2 To add energy meter, click: Device -> Device List -> Add Device.

7.3 Refer to the steps below and choose Next.

Logger1000	Ξ						⊗ 0 ∆ 0	English 🚨 O&M User	
🚼 Overview 🔫	Auto Search Add Device							Delete	
Device Monitoring	No.	SN	Device N	Add Device	× Device Address \$	Forwarding Modbus	Com Status	Operation	
🗙 Device 🔺				Device Type		ID ÷			
Device List			_	Meter V					
Firmware Update				Access Type					
Inverter Log				Electricity Meter					
AFCI Activation				Port	-				
Fault Recorder				C0M1 ~					
🛔 Power Control 🛛 👻				Device Model	_				
History Data				Others ~					
🌢 System 👻				Configuration Method	-				
About				Custom ~					
				Next					
A A A A A A A A A A A A A A A A A A A									

7.4 Check the parameters on the next page and set them according to the meter.

Logger1000	Ξ											8 0 ∆ 0	English 🔒 O&M User	
# Overview 🔻	Alls Search Add Device												Detete	
Device Monitoring	Configure Measuring Point X											< Operation		
X Device	Pute	Order			DT Transfor	mation Da	tio				CT Transformation Datio			
Device List	Big	-endiar	n for byte data, big-endian for w	ord data \sim	1						1			
Firmware Update	Beg	inning A	ddress		Quantity of I	Device								
Inverter Log	1				1									1
AFCI Activation	Deb	ug Addr	ress 1											
Fault Recorder		-										Read-back Save Template	49 49	
1 Power Control 👻		No.	Measurement Point Name	Device Modbus ID \$	Register Typ	e	Data Type		Read Type		Coefficient	Read-back Value	Unit	
Itistory Data		1	Phase A Voltage	3000	0x4	~	U16	~	Continuous	~	1.0		v	
🗘 System 💌		2	Phase B Voltage	3001	0x4	~	U16	~	Continuous	~	1.0		v	
About		3	Phase C Voltage	3002	0x4	~	U16	~	Continuous	~	1.0		v	
		4	A-B Line Voltage	3003	0x4	\sim	U16	~	Continuous	~	1.0		v	
		5	B-C Line Voltage	3004	0x4	~	U16	~	Continuous	~	1.0		v	
												В	ack Confirm	
😤 🖻 🛆														



For further information, please download the user manual <u>here</u>.

This manual is intended for professional technicians who are responsible for installation, operation, maintenance and troubleshooting of inverters, and users who need to check inverter parameters. The inverter must only be installed by professional technicians.

The professional technician is required to meet the following requirements:

- Know electronic, electrical wiring and mechanical expertise, and be familiar with electrical and mechanical schematics.
- Have received professional training related to the installation, commissioning and troubleshooting of electrical equipment.
- Be able to quickly respond to hazards or emergencies that occur during installation, commissioning and troubleshooting.
- Be familiar with local standards and relevant safety regulations of electrical systems.
- Read this manual thoroughly and understand the safety instructions related to operations.