



PLC Communication Monitoring Gateway **PV-SMG-001 series**



Specification	PV-SMG-001
Communication	
Communication with Microinverter	PLC
Ethernet	10Mbps/100Mbps (auto-negotiation)
USB	USB 2.0 (auto-negotiation)
Wi-Fi	Support
Monitoring Capability	255 devices (depending on power grid interference)
Human interface	
Visual display	LCD touch screen
Power requirements	
AC input	100-277 Vac, 50/60Hz, 260mA
Energy consumption	3.5W max
Mechanical data	
Dimensions	170*110*37mm
Weight	150g
Ambient temperature range	40°C to +55°C
Cooling	Natural convection
Environmental Rating	IP30
Characteristics	
Standard warranty term	1 year
Compliance	UL 60950-1 2nd Edition Rev Dec 19, 2011 CSA C22.2 2nd Edition Rev Dec 19, 2011 FCC Part 15 Class B

■ Connect to power grid

Plug the AC power cord into a dedicated power outlet. Once connected, the gateway will take several minutes to boot up.

- 1 SMG-001 works on voltages between 100Vac-240Vac
- 2 Install the gateway on a dedicated outlet as close to the solar-fed circuit breaker as possible.
- 3 Do not plug the gateway into a power strip, GFDI outlet or through an ELCB.
- 4 For split-phase power grid, we recommend using NEMA 6-15 240V power outlet.



NEMA 6-15 OUTLET

Input Micro Inverter Serial Number

Through gateway touch screen.



Through Built-in Web Page

(e.g. <http://10.208.32.52/module>)

10.208.32.52 is the gateway IP at the bottom of the touch screen

Inverter COM-ID Administration

(e.g. 21508-0005F123-U, input the whole string or "0005F123" or "SF123")

Inverter	COM-ID	phase
Inverter1:	0001AA04	A
Inverter2:	10001002	A
Inverter3:	10001003	A
Inverter4:	10001004	A
Inverter5:	10001005	A
Inverter6:	10001006	A
Inverter7:	10001007	A
Inverter8:	10000135	A
Inverter9:	10009D11	A



Note:Handheld barcodescanner is a very helpful tool in inputting the inverter SN.

S/N format: (e.g. 21508-3005F121-U, input the whole string "21508-3005F121-U" or "3005F121")

Connect To Internet

SMG-001 can be connected to internet using a cable. "DHCP" is the default option and most commonly used.

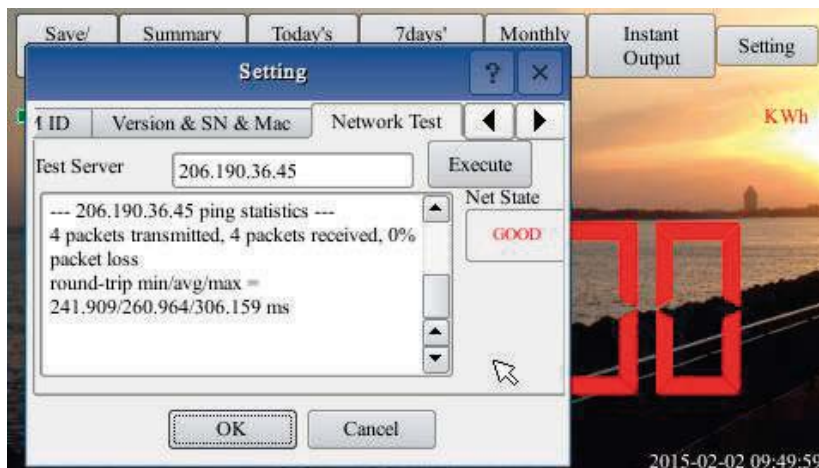


Refer to "Wi-Fi Configuration Guide" for setting up Wi-Fi

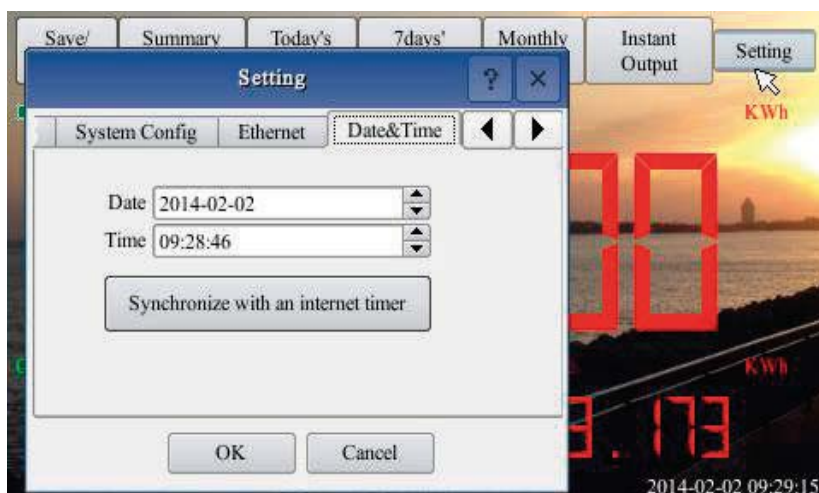


■ Test Network Connection

Navigate through "Setting" to "Network Test", and then click on "Execute". If the "Net State" shows Good, then the gateway has connected to internet.



■ Set Date/Time



■ Green Energy Remote Monitoring

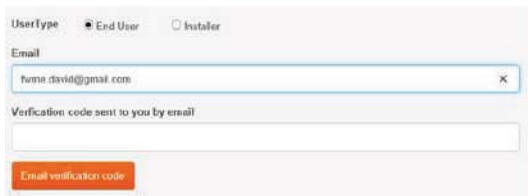
<http://www.meanwell.com/Follow the instructions and fill in information>



NOTE: "Green Energy" supports IE9.0 or later, Firefox, Chrome, Apple iOS and Android web browsers

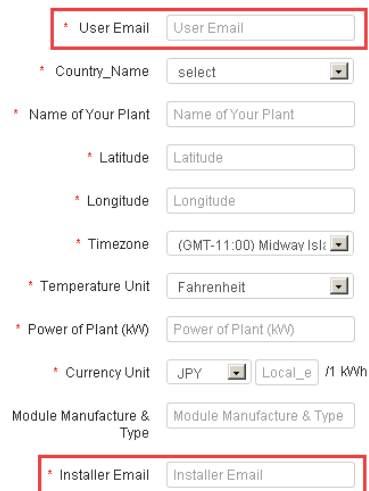
■ Register User Account

Verification code is sent to the email address registered.



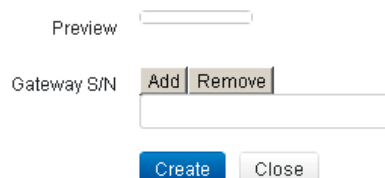
■ Add PV Site Information

Each PV site requires two registered email addresses: end user and installer

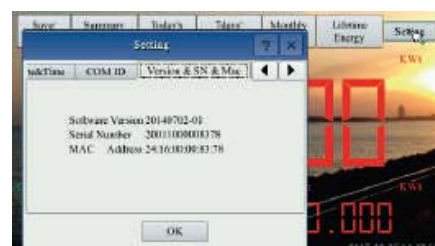


■ Register a Gateway

Add SMG-001 gateway SN in the vsite information



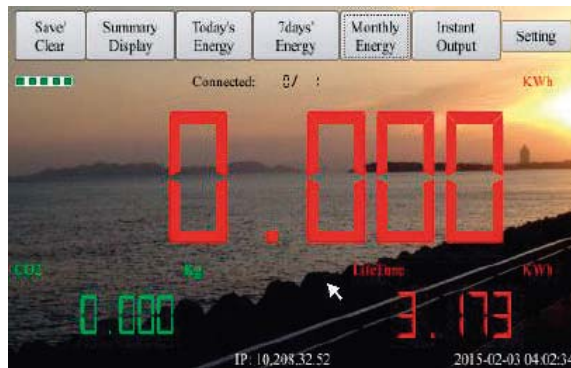
Add SMG-001 gateway SN can be found on touch screen/Version & SN & Mac



■ Microviewer Local Monitoring

SMG-001 can be monitored by a smart device connected to the same router

Gateway IP address:



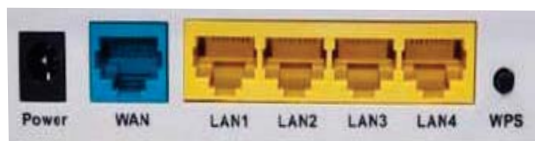
■ Wi-Fi Configuration Guide

■ Method A: By Routers Support WPS

Step-1: Plug the wireless adapter to SMG-001 gateway , and wait for several seconds



Step-2: Press the WPS button on the router for 2 seconds, and for most routers, the WPS button would flash at this point.



Step-3: Within 2minutes return to the SMG-001 gateway , click on Setting/Ethernet, and press "WPS" (the red button). If the gateway reports the WPS setup is successful, the IP address on the gateway screen will be updated instead of 0.0.0.0 within 5 minutes.



■ Method B: By Routers Do Not Support WPS

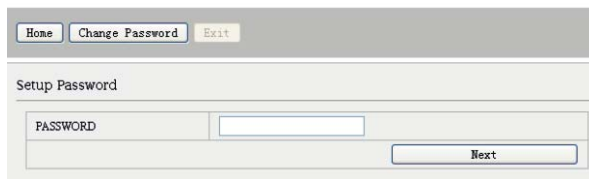
Step-1: Connect the SMG gateway to a router with a cable and a few seconds later, an IP address will appear at the bottom of the SMG-001 screen

Step-2: Log on to the webpage: <http://SMG-IP/wifi> (SMG-IP refers to the IP show at the bottom of SMG-001 screen e.g 10.208.32.52)

Step-3: Set Wi-Fi parameters

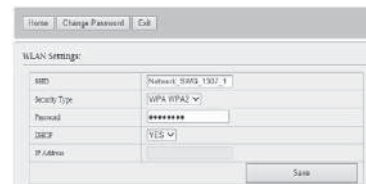
Enter the password "gateway"

Wireless Network Setup



Set WLAN parameters and save your settings

Wireless Network Setup



SSID: The name of the home wireless network.

Security type: The wireless adapter supports several security protocols. Please refer to the wireless router user's manual for suitable type (default one works for most routers).

Password: The password for home wireless network.

DHCP: If yes, the wireless router will assign an IP to the gateway. This is most commonly used (no need to change unless for advanced users).

IP: If DHCP is set to "NO", users could fix an IP to the gateway. This function is only for advanced users, who should be responsible for confliction with other network devices if this IP address is not set properly.

Step-4: Plug in the wireless adapter, and then reboot gateway



If Wi-Fi is connected, a signal strength bar at the left upper corner and an IP address at the bottom should be notified.

■ Method C: By Smart Mobile Devices

Step-1: On an iPhone, click on Settings/General/About. Input name "MI Installer"

Step-2: Turn on "Personal Hotspot", and input Wi-Fi Password my-gateway. This password is for other devices such as the SMG-001 gateway to connect to this mobile device.

Step-3: On the SMG-001 gateway click on Setting/Ethernet and choose "Connect to Mobile" or "Link to Mobile" (the green button)

Step-4: If the connection has been set, a flashing banner "Personal Hotspot: 1 Connection" will appear at the top of the iPhone screen.

Step-5: Continue from Step-3 of Method B.

Step-6: After using the hot-spot communication, Wi-Fi setup can be restored if the Wi-Fi configuration in SMG-001 gateway is not changed by hot-spot link. First hit on the button "Disconnect from Mobile" (see Step-3), and then reboot the gateway, then the Wi-Fi connection will be restored.



NOTE:

1. set the name of the hotspot link as "MI Installer"
2. set the password of the hotspot link as "My-Gateway"

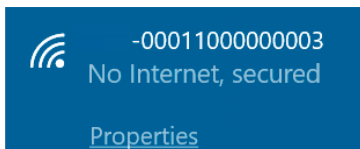
■ Method D: Using AP(Access Point) Mode

Step-1: Click on the AP button on the SMG-001 gateway and follow the instructions to reboot the gateway. Note that after reboot the IP address at the bottom of the gateway is 192.168.99.1



Note: This method only applies to SMG-001 gateways with firmware version "20170701-o1" or later and with the "TP-LINK" WiFi dongle shipped inside the SMG-001 box.

Step-2: Search for a WiFi network named MI-xxxxxxxxxxxx x (xxxxxxxxxxxx x is the gateway SN) on a phone or computer, and link the phone or computer to this WiFi network, the password is 12345678



Step-3: Log on to the webpage: <http://192.168.99.1/wifi> Enter password gateway.

Step-4: The pull down menu SSID List shows all available WiFi networks. Click on Search WiFi may rescan the available WiFi networks. If the WiFi network is "hidden" and does not show in the list, the network name can also be input manually on the line of SSID.

Wireless Network Setup



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Password: The password for home wireless network.

DHCP: If yes, the wireless router will assign an IP to the gateway. This is most commonly used (no need to change unless for advanced users).

IP: If DHCP is set to "NO", users could fix an IP to the gateway. This function is only for advanced users, who should be responsible for confliction with other network devices if this IP address is not set properly.

Step-5: Click on Save. Uncheck AP on the SMG-001 gateway touch screen and then reboot the gateway following instructions.

If Wi-Fi is connected, a signal strength bar at the left upper corner and an IP address at the bottom should be notified.