

Installation Manual Solar-Log® & GE Meter

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Technical Support

For additional support please visit www.solar-log-america.com under the Service & Support tab, and our experts will provide answers to any questions concerning Solar-Log® products or call our technical support team at (203) 702-7189.

Online Support

www.t-mobile.com/coverage.html

www.att.com/maps/wireless-coverage

www.solar-log-america.com/service-support

Getting Started

Required Hardware

- 2S socket meter base - 240/120V single phase (not included)



Before You Begin

Check electrical specification

- 240/120V single phase
- Max plant size 48 kW (200 A)

Check cellular coverage depending on installed SIM card

- Onsite with cellphone – must have 2 bars of signal showing GPRS/E/3G/4G or LTE
- T-Mobile: offsite at www.t-mobile.com/coverage.html
- AT&T: offsite at www.att.com/maps/wireless-coverage

If cellular coverage is not available, please use Solar-Log 350 LAN (Part No. 823210) or Solar-Log 370 (Part No. 225852) and connect to an internet router via Ethernet.

Installation Guide

Safety Precautions



DANGER! Lethal voltage inside the meter!

Thoroughly read and understand this guide before installing and operating the unit.

Follow all instructions and safety precautions in this guide.

Prior to performing any work turn off all power supplying the equipment in which the meter is to be installed.

Only qualified personnel should work on the meter and should be familiar with the technology and the hazards associated with electrical equipment.

Beware of potential hazards and wear personal protective equipment.

Only connect the meter as described in this manual.

Hazardous voltages can cause shock, burns or death. To prevent exposure to hazardous voltages, disconnect and lock out all power sources before servicing and removing components.

Modifications made to the product may void the warranty.

All work must be done in accordance to state and local code and safety practices.

Never work alone and before performing any tests, installation or maintenance on this equipment, isolate or disconnect all hazardous live circuits and sources of electric power. Assume that all circuits are live until they have been completely de-energized, tested, and tagged. Pay particular attention to the design of the power system. Consider all sources of power, including the possibility of back feed.

Meter Installation



Warning: The Solar-Log® & GE Meter contains lethal voltages. The meter should never be disassembled. Failure to observe this practice can result in serious injury or death. Do not interchange base and electronics module assemblies between meters. Calibration data stored in meter is particular to a matched base assembly and electronics module. Interchanging these components causes the meter to lose calibration.

The meter is plugged into a single phase, 3 wire, 2S meter socket using standard meter installation practices. The meter base has current and potential terminals extending outside from the back of the meter. These terminals engage with the socket jaws, which are connected to the service lines. The socket jaws provide heavy contact force with the help of spring.

Refer to page 8 for installing a Solar-Log 350 (or Solar-Log 350 LAN)

Refer to page 11 for installing a Solar-Log 360

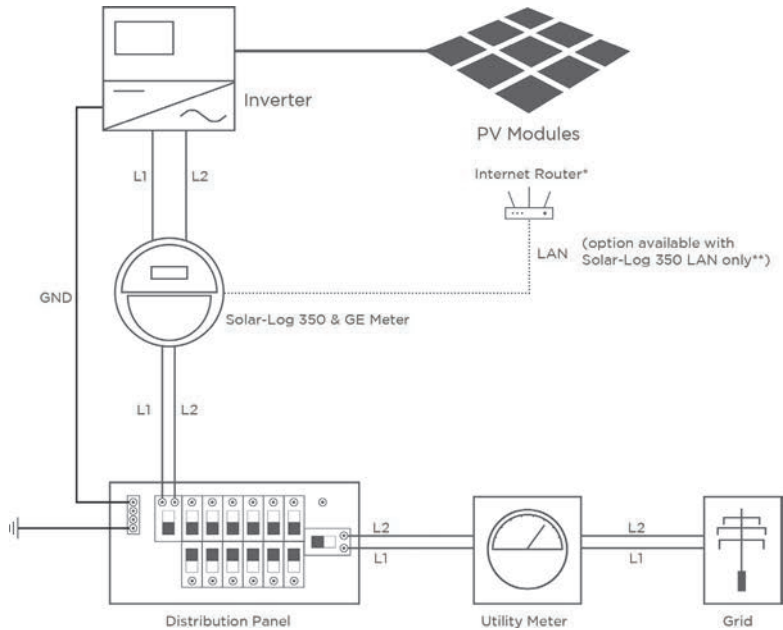
Refer to page 14 for installing a Solar-Log 370

Solar-Log 350 (and Solar-Log 350 LAN)



The Solar-Log 350 & GE Meter is a universal monitoring device for PV production and reporting. This easy to install device is compatible with all residential solar PV inverters and does not require on-site configuration.

Wiring Diagram



Notice: The wiring diagram includes rudimentary connection diagrams and is not intended as an installation guide. The diagrams are shown for informational purposes only.

*Internet Router is not provided

**Solar-Log 350 LAN is only recommended when cellular service is weak or unavailable onsite.

Step by Step

Step 1

Switch main breaker OFF in distribution panel and ensure all other voltage sources are off.



Step 4

Switch main breaker ON in distribution panel



Step 2

Install socket & electrical wiring according to local and national electric code



Step 5

Check meter LCD display to verify line voltage & power. See pg 21.



Step 3

Plug Solar-Log 350 & GE Meter into socket and replace cover



Step 6

Check LEDs (located at bottom)

Flashing Green (for Solar-Log 350)
Waiting for cellular connection

Solid Green (for Solar-Log 350)
Using Cellular Connection

Green with Quick Blink Every 5 Seconds (for Solar-Log 350 LAN)
Using LAN Connection

Other LEDs
See Troubleshooting

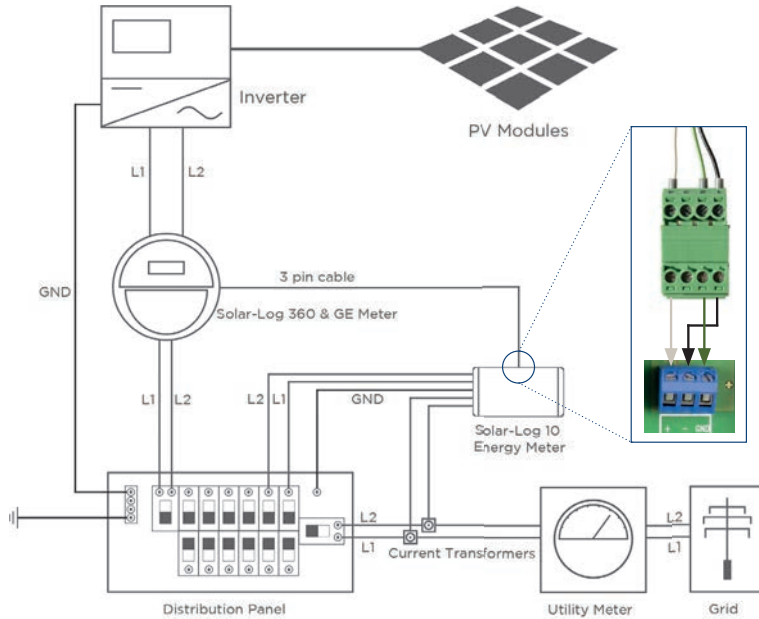


Solar-Log 360



The Solar-Log 360 & GE Meter is a universal monitoring device for PV production and home consumption. This easy to install device is compatible with all residential solar PV inverters and does not require on-site configuration. Included with the Solar-Log 360 is a Solar-Log 10 (bi-directional meter) and 2 current transducers (CTs) for measuring home consumption.

Wiring Diagram



Notice: The wiring diagram includes rudimentary connection diagrams and is not intended as an installation guide. The diagrams are shown for informational purposes only.

Step by Step

Step 1

Switch main breaker OFF in distribution panel and ensure all other voltage sources are off.



Step 5

Switch main breaker ON in distribution panel



Step 2

Install socket & electrical wiring according to local and national electric code



Step 6

Check meter LCD display to verify line voltage & power. See pg 21.



Step 3

Install SL 10 (bi-directional consumption meter) nearby distribution panel according to SL10 manual (1. install CTs - check arrows for correct energy flow! 2. do voltage tapping, 3. wire RS485)



Step 7

Check LEDs (located at bottom)

Flashing Green
Waiting for cellular connection

Flashing Yellow
Searching for SL10 device

Solid Green
Finished

Other LEDs
See Troubleshooting



Step 4

Plug Solar-Log 360 & GE Meter into socket and replace cover

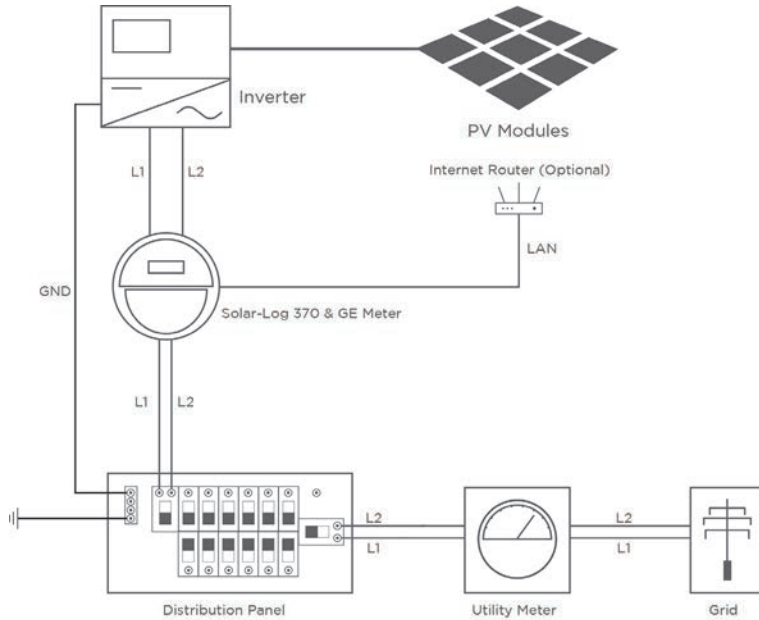


Solar-Log 370



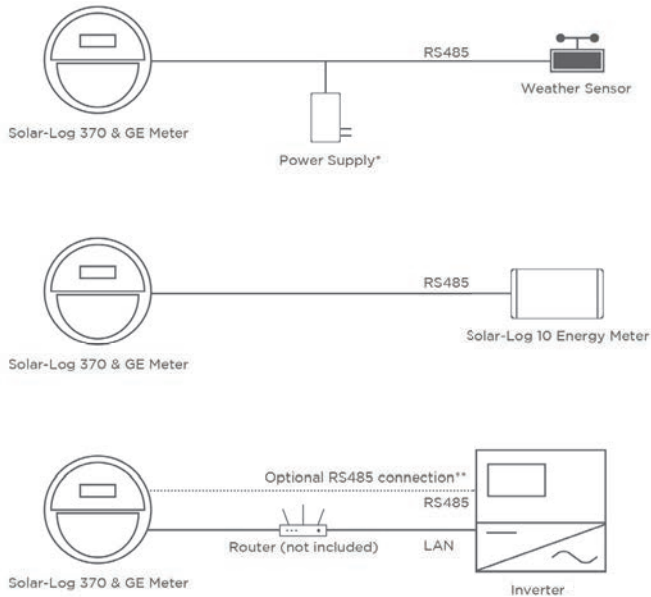
The Solar-Log 370 & GE Meter is a universal monitoring device for PV production and reporting with numerous connectivity options. This device is compatible with all residential solar PV inverters with easy on-site installation. The Solar-Log 370 comes with an LAN cable for internet connection and 2 x RS485 ports for inverter direct monitoring, weather station, consumption monitoring, and power management. Some pre-configuration in your Solar-Log® WEB portal is recommended if connecting to external devices.

Wiring Diagram (not for inverter direct monitoring)



Notice: The wiring diagram includes rudimentary connection diagrams and is not intended as an installation guide. The diagrams are shown for informational purposes only.

Optional Connections to External Devices including Inverter Direct



*120V outlet and power supply required for weather sensor. Power supply sold separately (part number 869203).

**Some inverter brands require direct monitoring via LAN connection. Consult the Solar-Log® & GE Meter Inverter Installation Appendix at www.solar-log-america.com/devices.

Step by Step

Step 1

Switch main breaker OFF in distribution panel and ensure all other voltage sources are off.



Step 2

Install socket & electrical wiring according to and national electric code



Step 3 (optional)

If connecting to external devices, complete the wiring according to their manuals. Refer to the Device Installation Manual on our website.

Note: It is recommended that you configure connected devices in the device detection page prior to step 5. See pg 19

Step 4

Plug Solar-Log 370 & GE Meter into socket and replace cover



Step 5

Switch main breaker ON in distribution panel.



Step 6

Check meter LCD display to verify line voltage & power. See pg 21.



Inverter must be on and producing for diagnostics.



Step 7

Check LEDs (located at

bottom)

Flashing Green

Waiting for internet connection

Flashing Yellow

Searching for external devices



Solid Green

Using Cellular Connection

Green with Quick Blink Once Every 5 Seconds

Using LAN Connection

Other LEDs

See Troubleshooting

Device Detection

All external device configuration is done on the device detection page. It is highly recommended that all configuration is done prior to turning the power on. Refer to the Device Installation Manual on our website for more information. The Solar-Log® serial number and Easy Code can be found on the back of the meter and manual. Have this information available for configuration.

Step 1

Visit <http://sl370.solarlog-web.net> and log-in.

Step 2

Click on 'add new device' and add all external devices like inverter, consumption meter (Solar-Log 10), or weather station accordingly. Press SAVE.

Step 3

Once all external devices have been entered click on 'start device detection'. It takes until the next data communication interval for the results to be visible.

Step 4

If all devices have not been detected check the wiring and click restart device detection.

Confirm Cellular Connection When Using LAN Communication

If the meter is connected to an internet router it will connect via Ethernet and the green LED will flash once every 5 seconds. To confirm that cellular service is also working as a backup for data transfer:

- Disconnect the LAN cable from the router
- Watch the green LED light to change to a solid green light indicating that the meter is now connected via cellular network. This process can take up to 15 minutes.
- If no cell service is available a solid red light appears instead.
- Once cell service is checked again reconnect the LAN cable to the router to resume Ethernet connection. The green LED will flash once every 5 seconds indicating LAN connection.

Solar-Log® & GE Meter LCD Status

Launch Device

On powering up the meter, verify meter operations by observing the LCD display

- For the first 5 seconds, the LCD will display an All Segment Test (all display items shown).
- LCD displays 5 digits for kWh as well as alternating volts and kW.

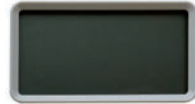
If the meter displays “Ser” error in the lower-left display section, it implies that the meter has been connected in a 12S/25S socket or to 3 phase service. Please confirm that the meter is connected correctly in a 2S socket.

For all other issues or error messages please contact Solar-Log® Support at (203) 702-7189

Troubleshooting

Blank Display - No line voltage

- Check breaker
- Check wiring



All Segment Display - Low line voltage

- Check line-to-line voltage for ~240V



●	●	●	Problem	Solution
On	Flash		Searching for external devices	Check wiring instructions Install device outdoors
		On	No cellular network (and no internet router)	Use signal booster Connect LAN to internet router or check cable
Flash	Flash	On	Signal too low	Install device outdoors Use signal booster Connect LAN to internet router or check cable
	Flash	On	SIM card problem	Call support (below)
		Flash	SIM card roaming problem	Call support
On	On		External device offline	Check external device

For further assistance call Solar-Log® Support (203) 702-7189

Solar-Log® WEB Registration

Before or After Installation

Step 1: Prepare

Please complete the following plant information to have on-hand for Solar-Log® WEB Registration

*Plant Name
(as it will appear in the Solar-Log® WEB portal):
.....

*Address:
.....

Plant size in kWp (total power of the PV plant):
.....

Installation date:
.....

Module orientation and pitch:
.....

Picture of plant (optional)
.....

Inverter Type:
.....

*Serial Number and easy Code
(on back of this booklet)
.....

Visibility setting (public or private):
.....

* Required Information for WEB Registration

Plant Owner Information (if different from above)

Name:
.....

Address:
.....

Email Address:
.....

Step 2: Register

Installers or Commercial Users:

Call our support team at (203) 702-7189 to complete the set-up of your WEB portal. Please have the prepared information from Step 1 on-hand.

Individual Plant Owners (Solar-Log® WEB “Classic 2nd Edition”):

1. Go to <http://home.solarlog-web.net/register.html>
2. Complete the form with the information from Step 1 and select “Register Now”.
3. You will receive a confirmation email within 5 minutes. Click the link provided to confirm your email address.
4. Please allow 48 hours for Solar-Log® to complete the setup of your portal. Once registration is complete, you will receive an email which will contain your log-in information.

The Solar-Log® technical support team is available Monday through Friday, 8:00 am to 5:00 pm, EST. to help with WEB registration or to answer any questions, (203) 702-7189.

Appendix 2: Equipment Warranty

1st Edition 12 April 2016

This Seller's warranty is restricted to products that are manufactured by Solar Data Systems, Inc. and excludes products acquired from other manufacturers which are in turn resold. The warranty conditions of these manufacturers apply to their own products. Seller warrants that Products shall be delivered free from defects in material, workmanship and title and that Services shall be performed in a competent, diligent manner in accordance with any mutually agreed specifications. The warranty for Products shall expire five (5) years from the date of purchase by the end customer.

If Products or Services do not meet the above warranties, Buyer shall promptly notify Seller in writing prior to expiration of the warranty period. Seller shall (i) at its option, repair or replace defective Products and (ii) re-perform defective Services. If despite Seller's reasonable efforts, a non-conforming Product cannot be repaired or replaced, or non-conforming Services cannot be re-performed, Seller shall refund or credit monies paid by Buyer for such non-conforming Products and Services. Warranty repair, replacement or re-performance by Seller shall not extend or renew the applicable warranty period. Buyer shall obtain Seller's agreement on the specifications of any tests it plans to conduct to determine whether a nonconformance exists.

Guarantee work requires that sufficient proof, e.g. a proper purchase receipt, has been submitted and the guarantee claim has been made within the guarantee period.

Buyer shall bear the costs of access for Seller's remedial warranty efforts (including re-

removal and replacement of systems, structures or other parts of Buyer's facility), de-installation, decontamination, reinstallation and transportation of defective Products to Seller and back to Buyer.

The warranties and remedies are conditioned upon (a) proper storage, installation, use, operation, and maintenance of Products, (b) Buyer keeping accurate and complete records of operation and maintenance during the warranty period and providing Seller access to those records, and (c) modification or repair of Products or Services only as authorized by Seller in writing. Failure to meet any such conditions renders the warranty null and void. Seller is not responsible for normal wear and tear.

This warranty does not apply if the Product is damaged or demolished by an "Act of God" or by environmental influences, or if the product is connected to an inverter not supported by Solar Data Systems, Inc and as a result has been damaged, or if the Product is fitted with additional parts and accessories that are not compatible with the unit and do not comply with the original specifications.

This Equipment Warranty provides the exclusive remedies for all claims based on failure of or defect in Products or Services, regardless of when the failure or defect arises, and whether a claim, however described, is based on contract, warranty, indemnity, tort/extra-contractual liability (including negligence), strict liability or otherwise. The warranties provided in this Equipment Warranty are exclusive and are in lieu of all other warranties, conditions and guarantees whether written, oral, implied or statutory.

No implied or statutory warranty, or warranty or condition of merchantability or fitness for a particular purpose applies.

Sticker with Solar-Log®
Serial Number
EasyCode

