

How Sungrow inverters monitor load consumption?

Disclaimer

The material in this document has been prepared by Sungrow Australia Group Pty. Ltd. ABN 76 168 258 679 and is intended as a guideline to assist solar installers for troubleshooting. It is not a statement or advice on any of the Electrical or Solar Industry standards or guidelines. Please observe all OH&S regulations when working on Sungrow equipment.

The load consumption feature for Sungrow Crystal G2 and Three Phase inverters is now available if they have a **Wi-Fi V25 / V31 dongle** and a **Sungrow S100 / T65 energy meter installed** (T65 meter only compatible with Three-Phases inverters). If these Wi-Fi devices are connected to our monitoring portal iSolarCloud, we can remotely to upgrade firmware for these inverters. Customers will then be able to view the load consumption as displayed in Figure 1.

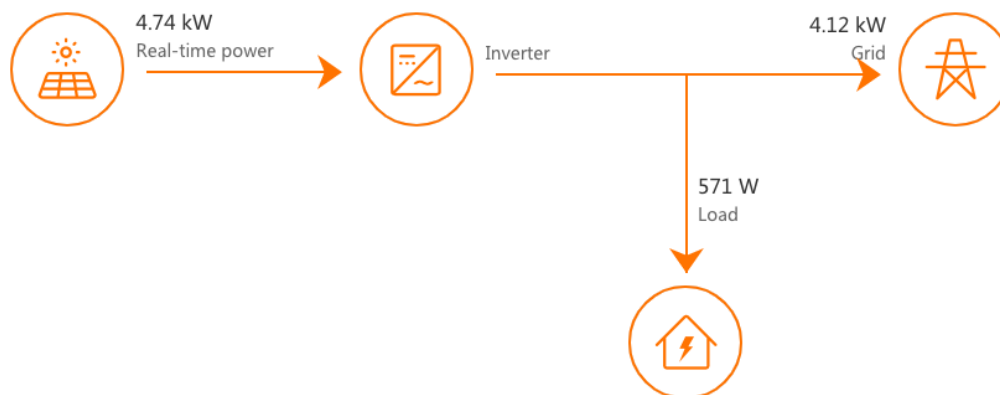


Figure 1 Load Consumption Monitoring

To monitor load consumption, the firmware for both the Wi-Fi dongle and the inverter may need to be upgraded. This can be done locally when on site using the “Local Access” option on the login page of the iSolarCloud app or remotely when not on site. Please ensure that the inverter has a Wi-Fi V25 / V31 dongle and a Sungrow S100 / T65 energy meter before any firmware is upgraded, else, iSolarCloud will not be able to display load consumption monitoring.

For Local Upgrades (On-Site)

The inverter and Wi-Fi dongle firmware can be upgraded locally when on site using the iSolarCloud APP. We encourage solar installers to upgrade firmware locally for load consumption since it will be more effective and it only take about 10 minutes.

Please refer to the links below and they will redirect you to a document / video that explain the process of local firmware upgrade.

- [Local Firmware Upgrade Document](#)
- [Local Firmware Upgrade Video](#)

When performing the firmware upgrade, it is important to use the correct firmware file as using the incorrect file may damage the inverter. On attempting to download the firmware on the app, it will give you a list of files for different types of inverters. Table 1 explains which file to use for a specific type of inverter / Wi-Fi dongle.

Table 1 Corresponding Firmware Files

Inverter Type / Model	Firmware File*
Single-Phase Grid Connected Inverters (Single MPPT) (Eg: SG2K-S, SG2K5-S, SG3K-S)	<i>CrysG2S_V31_V52_191018.zip</i>
Single-Phase Grid Connected Inverters (Dual MPPT) (Eg: SG3K-D, SG5K-D)	<i>CrysG2D_V31_V52_191018.zip</i>
Single-Phase Grid Connected Inverters (SG8K-D)	<i>SG8K-D.zip</i>
Three-Phase Grid Connected Inverters (SG5KTL-MT)	<i>SG5KTL-MT.zip</i>
Three-Phase Grid Connected Inverters (SG10KTL-MT, SG15KTL-M, SG20KTL-M)	<i>SG15KTL-MSG20KTL-MGS10KTL-MT.zip</i>
Wi-Fi Dongle V25	<i>M_WIFI-RAK475_V25_V01_B</i>
Wi-Fi Dongle V31	<i>M_WIFI-RAK475_V31_V01_M_191018.zip</i>

Note: For three-phase inverters, you will also need to enable the export function via local access to be able to read grid and load value. Please click [here](#) for more information.

**Sungrow will update the latest firmware regularly and this will be available on the iSolarCloud APP.*

For Remote Upgrade

Sungrow Service team can upgrade the firmware for the inverter and the dongle remotely if needed. To upgrade the firmware, please send an email to service@sungrowpower.com.au with the following information:

- **Inverter Type**
- **Inverter SN**
- **Wi-Fi Dongle SN**
- **Plant Name**

Once all the details are received, the firmware will be upgraded remotely. Please allow up to a week after sending the information to be able to see the load consumption.

If you have any questions, please contact Sungrow Service Department on 1800 786 476 or email to service@sungrowpower.com.au.