

Technical Note –Storing and Sending SolarEdge Inverter and Power Optimizer Data - 12/2012

Storing and Sending SolarEdge Inverter and Power Optimizer Data

Storing Data:

The SolarEdge inverter is capable of storing data for a period of time that is relative to the number of power optimizers connected to it.

Estimated maximum retention time is:

- Inverters with CPU version lower than 2.400:

 Number of Days Stored ≈ 250/Number of power optimizers per inverter
- Inverters with CPU version 2.400 and above (available from Feb. 2013):
 Number of Days Stored ≈ 530/Number of power optimizers per inverter

Examples:

Number of optimizers	Approximate retention time (CPU Ver.< 2.400)	Approximate retention time (CPU Ver. > 2.400)
12	20 days	44 days
24	10 days	22 days
50	5 days	11 days

If the connection to the monitoring portal is unavailable for a period greater than the approximate retention time, the inverter will either cease storing data (inverter CPU version 1.xxx) or overwrite old data in favor of recent data (inverter CPU version 2.xxx).

Sending data:

Connection to the SolarEdge monitoring portal is done through the internet, using one of the following:

- 1. A LAN (local area network) connection between the inverter and a switch/router (wired or wireless)
- 2. A GSM/GPRS cellular modem

When a connection is made, data is transferred automatically to the monitoring portal. Upon completion, the inverter verifies that the transfer was done correctly, and then erases the data. Data is not erased unless confirmation is received from the portal.

For a connection that requires a data package (e.g. cellular modem), the calculation of the transmission size is relative to the number of devices in the system:

- Power optimizer 0.4 MByte/Month
- Inverter 8.5 MByte/Month

Total Transmission Size [Mbyte] = number of inverters x 8.5 + number of optimizers x 0.4