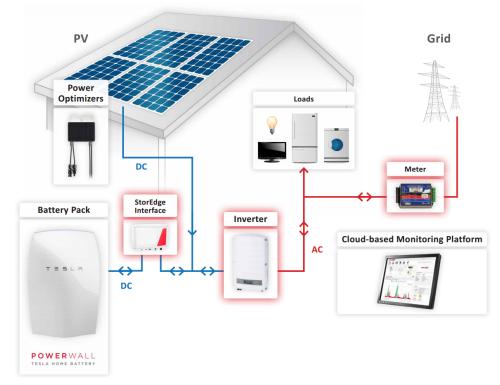
Application Note - Preparing a SolarEdge System for Future StorEdge™ Upgrade (Germany and UK)

StorEdge Solution Overview

SolarEdge's StorEdge DC coupled storage solution allows home owners to maximize self-consumption and to enable energy independence. The StorEdge solution is based on and managed by a single SolarEdge inverter for both PV and battery management. It is compatible with the Tesla Powerwall Battery via the StorEdge Interface.

The following figure illustrates the StorEdge system layout and components.



The StorEdge Solution comprises the following products:

- Single phase inverter
- StorEdge Interface
- SolarEdge Modbus Meter
- Tesla Powerwall Home Battery for Daily Cycle Applications

Installation Information

SolarEdge systems can be installed today and upgraded later with the StorEdge Interface and the battery.

Prepare Your System Today

To have a PV system ready for storage capabilities, follow these steps:

- 1. Install an inverter:
 - Install an inverter manufactured from since <u>Dec. 2013</u>. It can be upgraded as follows:
 - Systems with inverters manufactured from work week (WW) 37 2015 (available for order under the usual part numbers SExxxx-ER-01-DEU – upgrade later with the StorEdge Interface and the battery, with no changes to the inverter.
 - Systems with inverters manufactured between Dec. 2013 and WW37 2015 upgrade later with the StorEdge Interface and the battery, and with an inverter upgrade kit.

NOTE

To check an inverter manufacturing week, check its serial number: the 3rd and 4th characters indicate the production week; 5th-6th characters indicate the year. For example, an inverter with serial number SJ**37**15A-07F004FE5-B3 was manufactured in week 37 2015.

- Keep the required inverter clearances specified in the *SolarEdge Installation Guide*.
- Leave enough room for the StorEdge components to be installed later (battery and StorEdge Interface, see details in the next step). This way they can easily be added without changing installed equipment locations.
- 2. Install a meter if required for production/consumption monitoring or for feed-in limitation, otherwise it can be installed later with the battery.
 - When installing a StorEdge system, a SolarEdge Modbus meter should be installed on the grid connection point or the load connection point.
 - The meter connects to the inverter using an RS485 cable.
- 3. Plan the StorEdge system layout:
 - The battery and StorEdge Interface will connect to the DC side of the inverter. Since the inverter DC connections are on its left side, it is recommended to position the battery and interface to the left of the inverter to simplify wiring.
 - To simplify cable management, a distance of 1.5m between barttery and interface is recommended.



- Make sure the installation can accommodate the StorEdge Interface:
 - The StorEdge Interface connects between the battery and the inverter. It requires an AC connection (AC plug) for powering the interface. This AC connection is not used for charging the battery.
 - Leave at least 200 mm to the bottom of the interface for cable entry.
 - Dimensions (HxWxD): 206,6 x 316 x 117,5 mm
 - Weight: 3 kg
- Make sure the installation can accommodate the battery:
 - The maximum distance between the battery and the inverter is 10m.
 - Leave at least 300 mm above the battery to the ceiling, and at least 1800 mm to other objects, such as shelves or electronics.
 - \circ $\,$ Leave at least 300 mm to the bottom of the battery for cable connections.
 - Dimensions (HxWxD): 1300 x 860 x 180 mm
 - Weight: 100 kg. Make sure the installation surface can withstand this weight.

Upgrade Your System Later

1. Install the StorEdge Interface as described in the manual supplied with it.



If two strings are connected to the inverter, use a 2-to-1 cable splitter (not supplied by SolarEdge) to connect the StorEdge Interface to the inverter DC input.

- 2. Install the battery as described in the manual supplied with it.
- 3. If your inverter was manufactured between Dec. 2013 and WW37 2015, upgrade the system using an inverter upgrade kit.



