



The StorEdge™ Solution

Enabling Energy Independence



Compatible with



The StorEdge Solution: Enabling Energy Independence

Combining SolarEdge's breakthrough PV inverter technology with leading battery storage systems, the StorEdge solution helps homeowners reduce their electricity bills while maximizing energy independence from the grid.



StorEdge is based on a single SolarEdge DC optimized inverter that manages and monitors PV production, consumption and storage. The StorEdge solution is compatible with high voltage batteries from LG Chem.

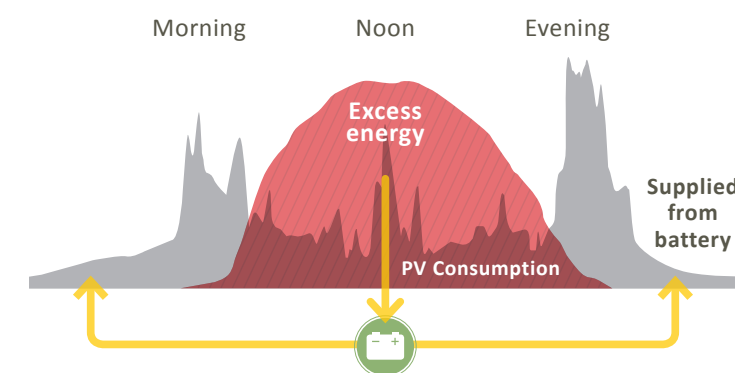
LG Chem RESU



TWO APPLICATIONS ARE AVAILABLE

Optimizing Self-Consumption

The StorEdge solution can be used to increase energy independence for homeowners, by utilizing a battery to store power and supply power as needed. To optimize self-consumption, the battery is automatically charged and discharged to meet consumption needs and reduce the amount of power purchased from the grid.



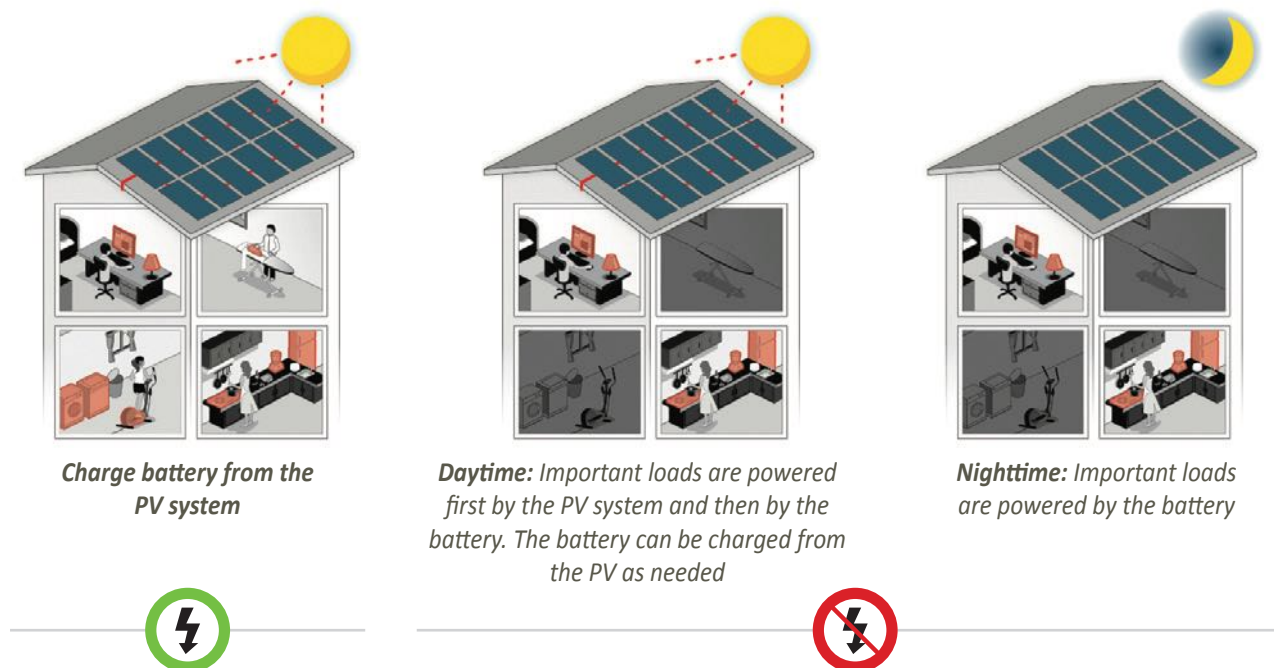
Using StorEdge, excess energy produced during peak sunlight hours when consumption is low is stored to a battery and used later. Energy isn't wasted!

Optimizing Self-Consumption + Backup Power*

In addition to optimizing self-consumption, StorEdge can also automatically provide backup power to pre-selected loads when the household suffers from grid interruptions. A combination of PV and battery is used to power important loads such as the refrigerator, TV, lights and AC outlets, day or night.

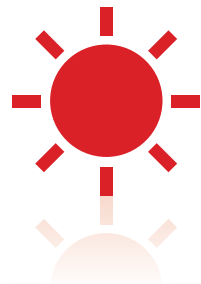
* Backup capability is only available in certain countries. Check with your local SolarEdge sales person.

Providing backup power day or night



Maximizing the Homeowner's Solar Investment with StorEdge

The StorEdge system has many benefits for the homeowner as well as the PV installer.



More Energy

- > Power optimizers increase rooftop energy harvest
- > PV power is stored directly in the battery
- > DC coupled battery solution allows high system efficiency
- > No additional conversions from AC to DC and back to AC



Simple Design & Installation

- > A single inverter for PV, storage and backup power
- > Outdoor installation allows flexibility in battery location
- > No special wires are required > utilizes the same PV cables



Full Visibility & Easy Maintenance

- > Monitor the battery status, PV production, and self-consumption data from a single dashboard
- > Smarter energy consumption to reduce electricity bills
- > Monitor battery energy levels and remaining hours of backup power
- > Remote diagnostics
- > Remote firmware upgrades to both inverter & battery



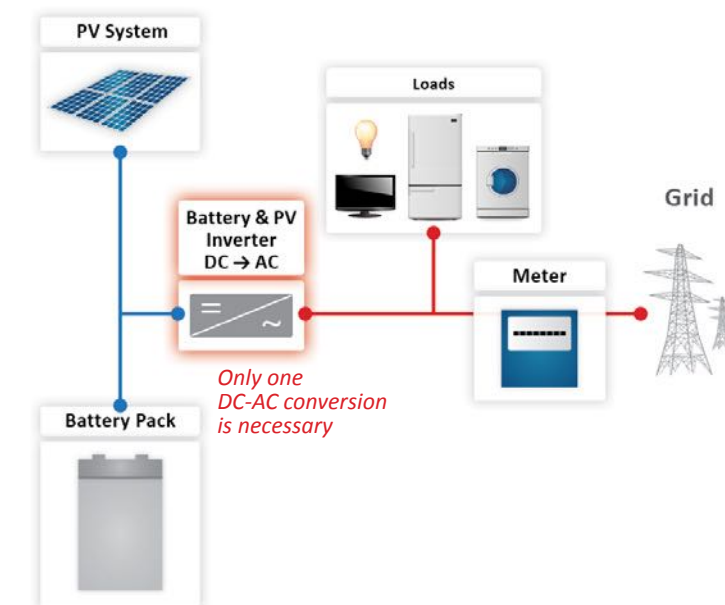
Enhanced Safety



- > PV array and battery voltage reduced to a safe voltage automatically upon AC shut down when not in backup mode
- > Complies with VDE 2100-712 and IEC 60947

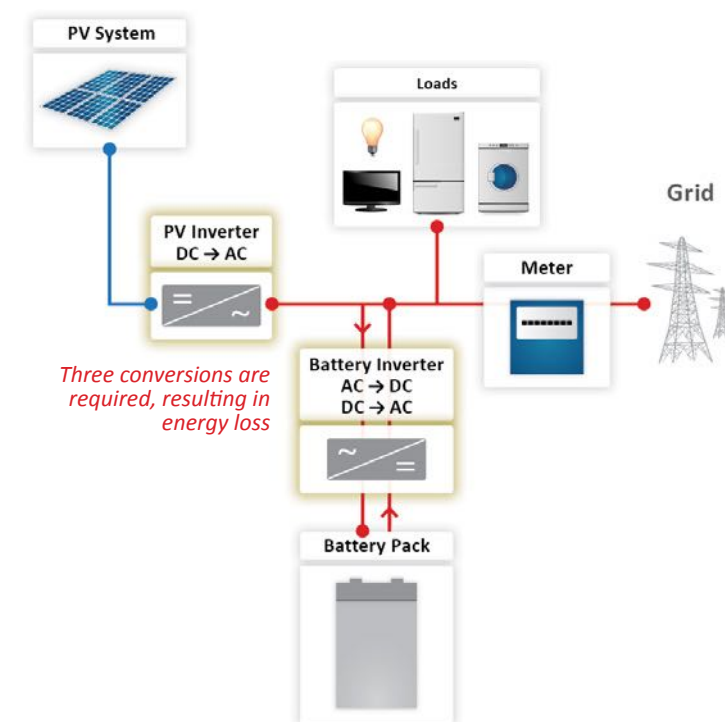
PV System with DC-Coupled Storage

solar**edge**



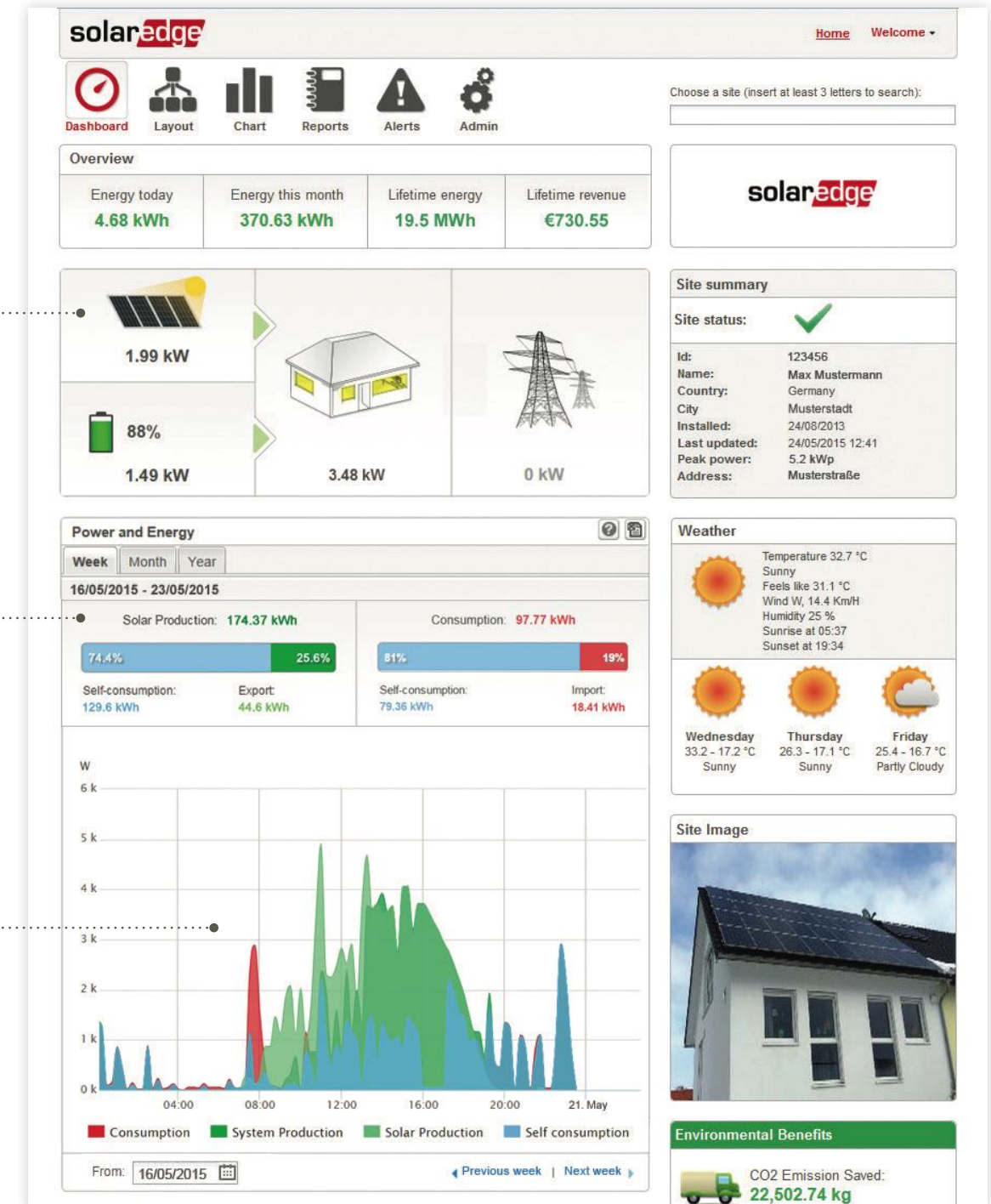
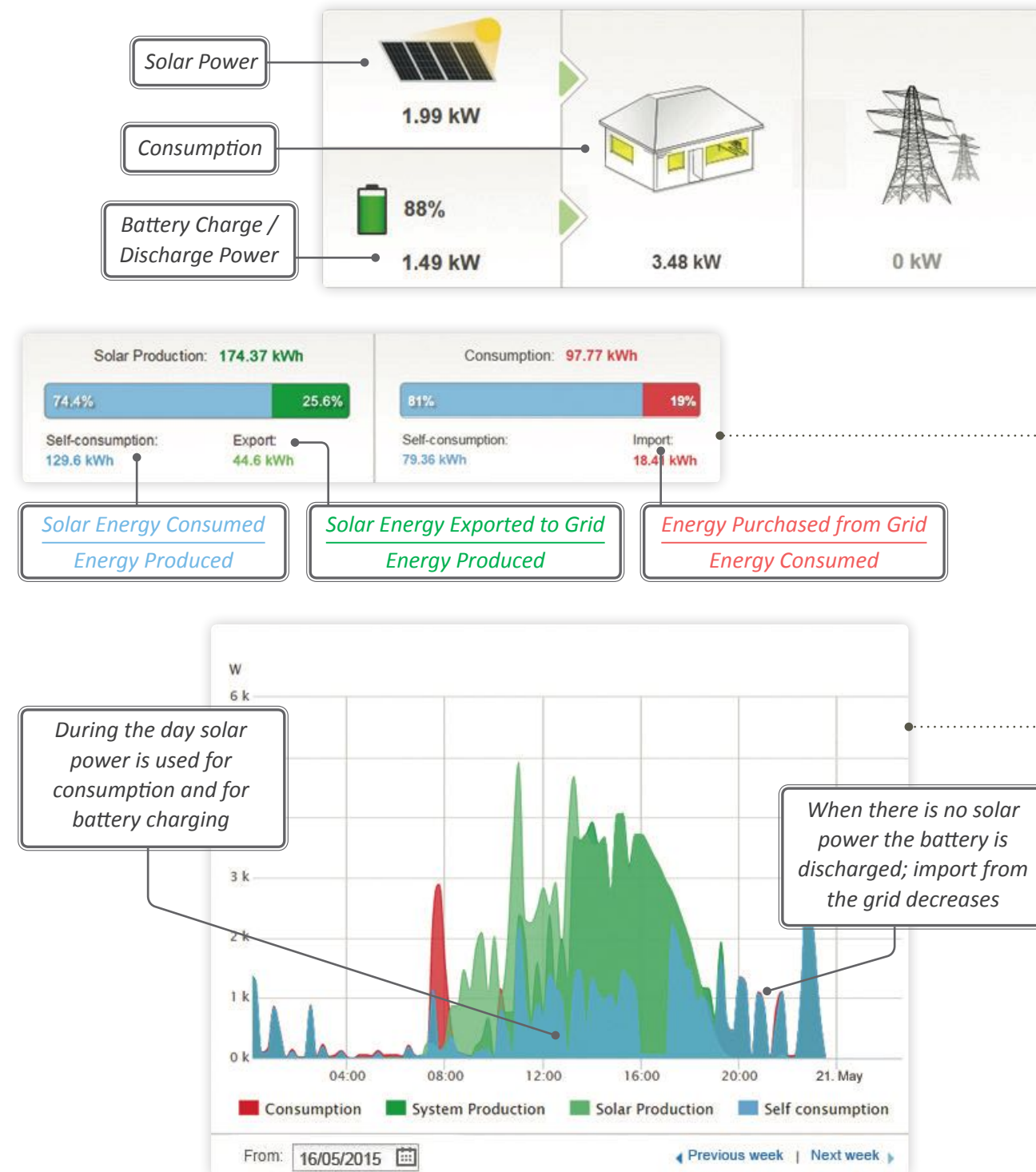
Vs.

PV System with AC-Coupled Storage



Full Monitoring of PV and StorEdge Systems

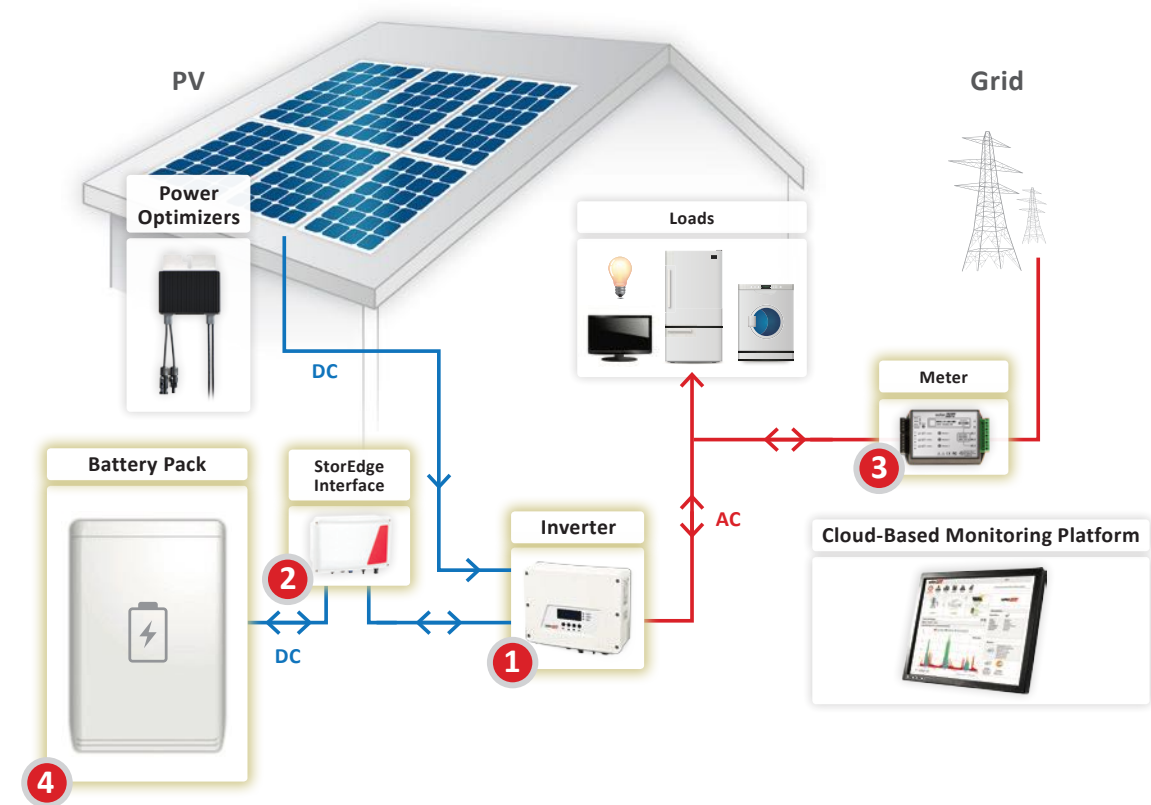
The SolarEdge cloud-based monitoring platform provides insight into household PV production and consumption, displaying the power flow between the PV array, battery, grid and house loads as well as tracking real-time system data.



Dashboard from the SolarEdge cloud-based monitoring platform

StorEdge Applications: Basic Configurations

Optimizing Self-Consumption



1

SolarEdge Single Phase Inverter

The SolarEdge inverter manages battery and system energy, in addition to its functionality as a DC PV inverter

2

StorEdge Interface

Connects the battery to a SolarEdge inverter
Connects to the inverter in parallel to the PV strings

3

SolarEdge Meter

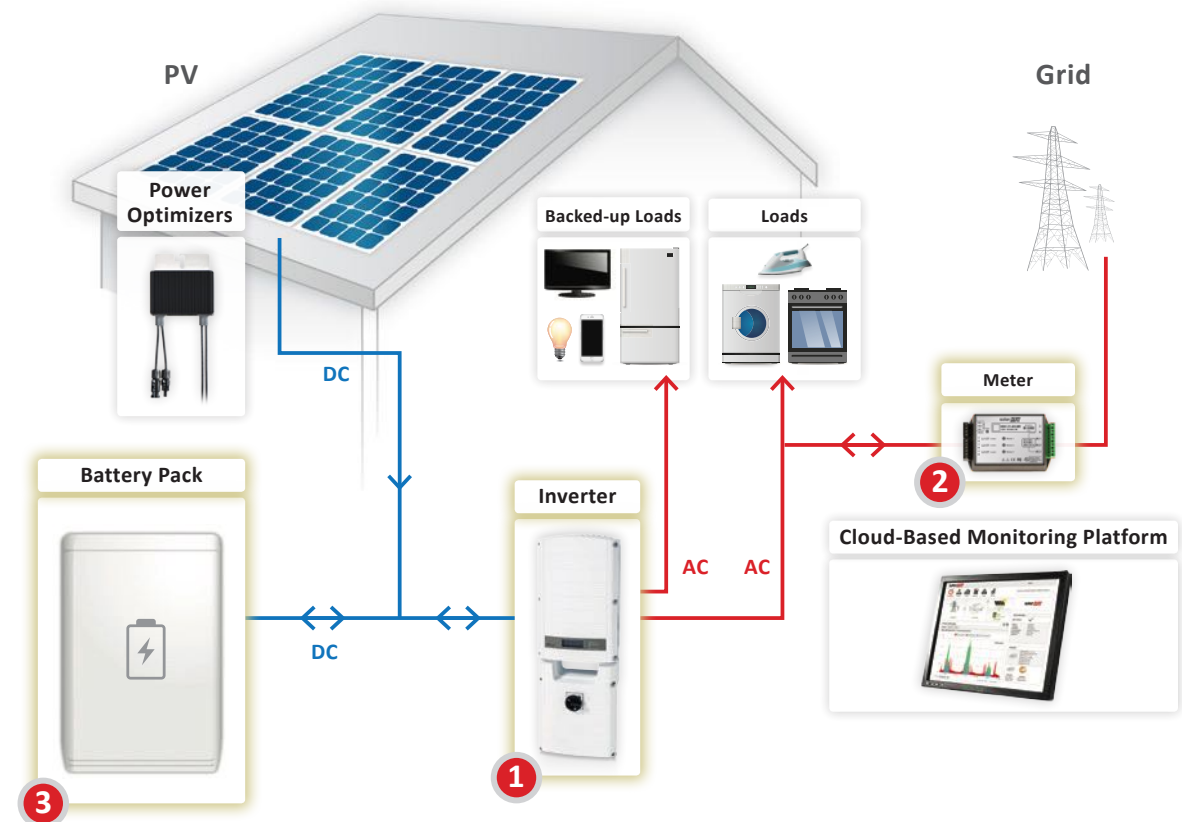
For measuring electricity import and export
Meter is required for self-consumption management

4

Battery Pack

Compatible with DC coupled, high-voltage and high-efficiency batteries from LG Chem
Compatible with LG Chem

Optimizing Self-Consumption + Backup Power*



1

SolarEdge Single Phase StorEdge Inverter

The StorEdge Inverter manages battery, system energy and backup power, in addition to its functionality as a DC PV inverter

2

SolarEdge Meter

For measuring electricity import and export
Meter is not required for a backup-only solution

3

Battery Pack

Compatible with DC coupled, high-voltage and high-efficiency batteries from LG Chem
Compatible with LG Chem

* In supported regions only. Check with your local SolarEdge sales person.

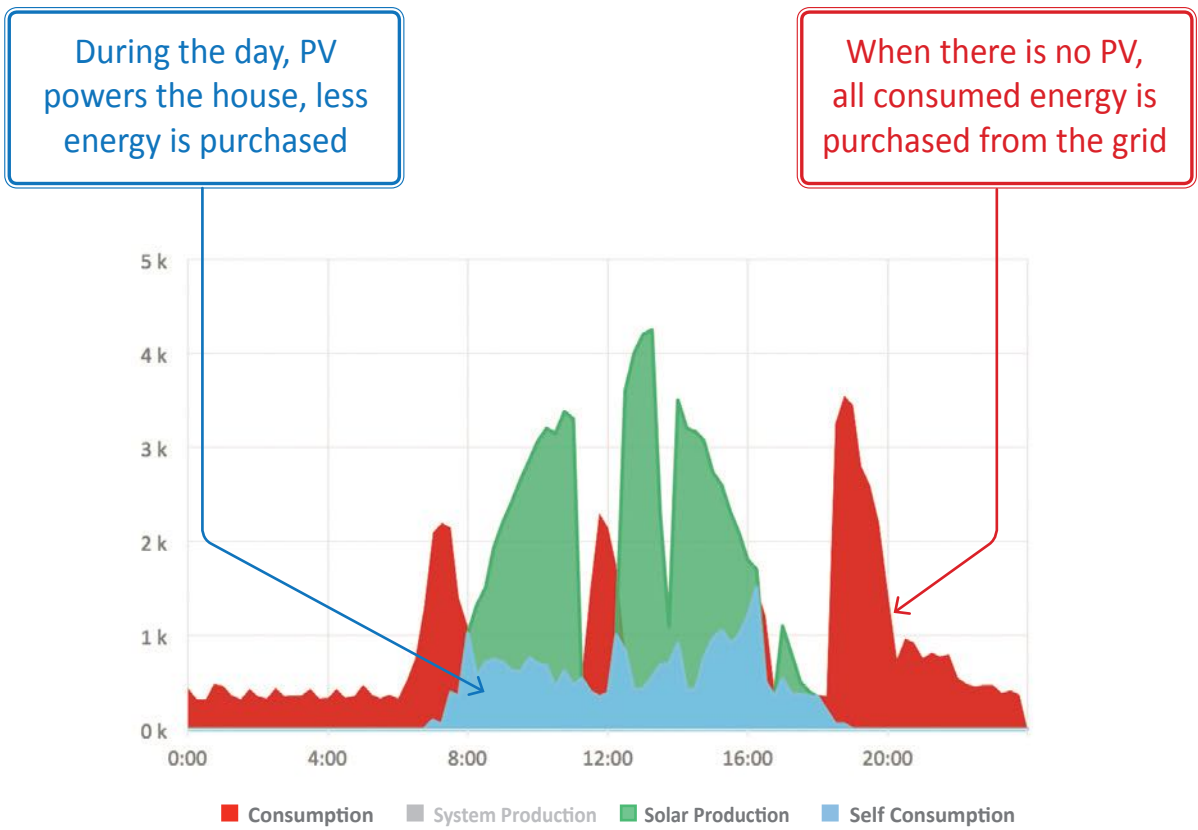
StorEdge Case Study: Increasing Self-Consumption

By simply adding StorEdge to its existing SolarEdge PV system, this typical household was able to more than double its self-consumption levels

BEFORE - monitoring self-consumption:

5kW System on April 8, 2015 (before battery installation)

Total produced energy	Total purchased energy	Total consumed energy	Self-consumption level
21.37 kWh	13.57 kWh	20.61 kWh	7.04kWh 33%

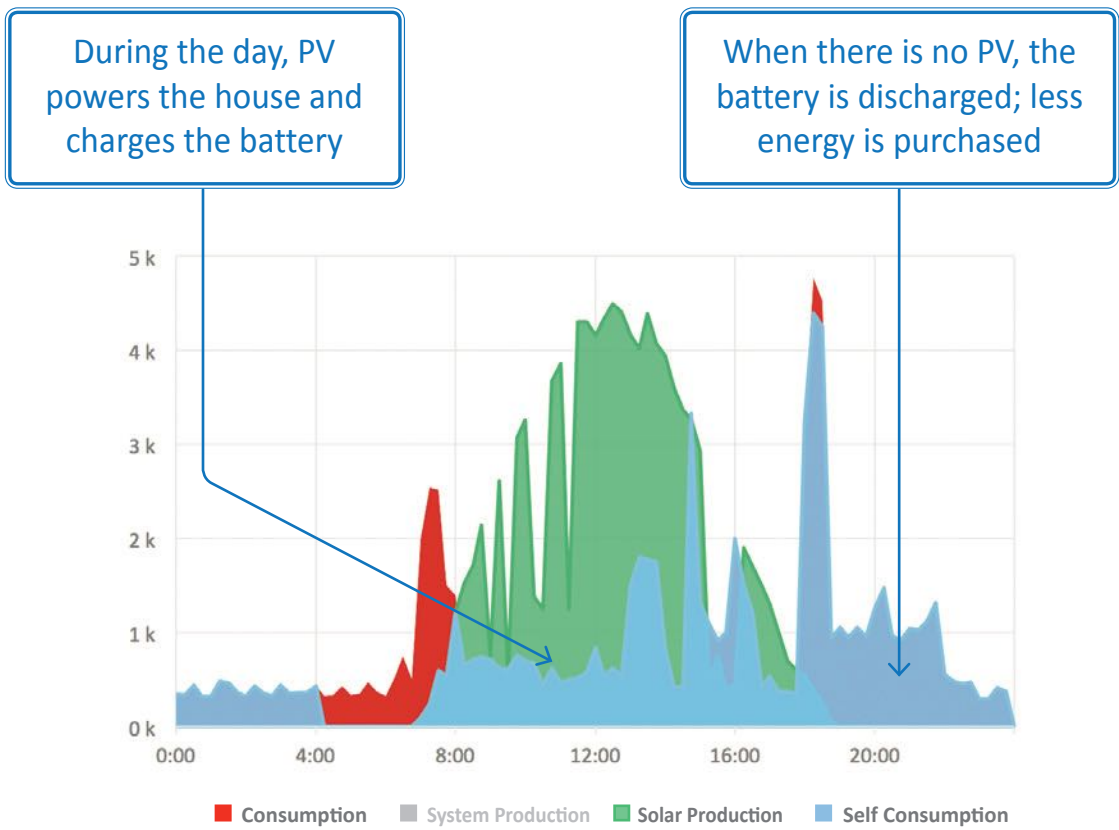


*Based on a SolarEdge 5kW residential PV system

AFTER - increasing self-consumption:

5kW System on April 15, 2015 (after battery installation)

Total produced energy	Total purchased energy	Total consumed energy	Calculated self-consumption level
25.41 kWh	3.17 kWh	21.53 kWh	18.36kWh 72%



After installing StorEdge, PV self-consumption jumped from **33% to 72%**




SolarEdge invented an intelligent inverter solution that has changed the way power is harvested and managed in PV systems. Addressing a broad range of solar market segments, from residential to commercial and large scale solar, the SolarEdge DC optimized inverter solution includes PV inverters, power optimizers, and cloud-based monitoring. By connecting power optimizers to each module, the system enables superior power harvesting and module management.

SolarEdge has been shipping its DC optimized inverter solution worldwide since 2010 and is traded on the NASDAQ under the SEDG symbol.

For more information on SolarEdge:

 www.solaredge.com

 info@solaredge.com

 www.twitter.com/SolarEdgePV

 www.facebook.com/SolarEdge



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