




# MAKING PV SYSTEMS SMARTER

SolarEdge Residential Offering  
for Installers



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12kW SolarEdge system, UK  
Installed by WeRSolar  
Project designed by Howarth Litchfield

# SolarEdge Fact Sheet

## About Us

In 2006, SolarEdge invented an intelligent inverter solution that has changed the way power is harvested and managed in PV systems. SolarEdge provides module-level electronics for solar power harvesting and monitoring for residential, commercial, and utility-scale solar PV installations. The SolarEdge DC optimized inverter system maximizes power generation at the PV module level while lowering the cost of energy produced by the solar PV system.

### Vision

- > As a leading provider of intelligent inverter solutions for the PV industry, our vision is to enable every solar module to be individually managed by DC-DC module-level electronics
- > Our goal is to accelerate the pace toward grid parity and make clean, renewable solar energy affordable and widespread



### Bankability

- > SolarEdge has been audited and approved by major banks and financial institutions for projects and funds worldwide
- > Publicly traded on the NASDAQ under the SEDG symbol

### Global Outreach

- > Systems installed in 120 countries
- > Sales via leading integrators and distributors
- > Follow the sun call centers
- > Local teams of sales, service, marketing, and training experts
- > Global manufacturing with tier 1 electronic manufacturing service companies



**INNOVATION  
GUARANTEED**

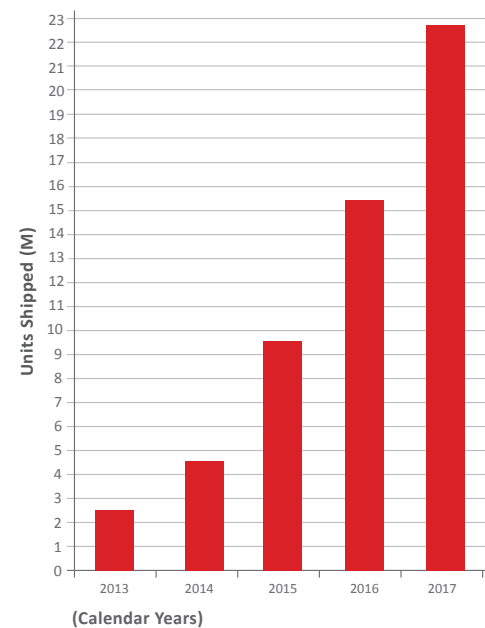


- > Received nearly 30 awards, from prestigious organizations ranging from Red Herring to Frost & Sullivan

### Business Figures

- > 22,700,000 power optimizers and 950,000 inverters shipped worldwide
- > Monitoring platform continuously tracks over 560,000 PV installations

Power Optimizers Shipped (Cumulative)



### Corporate Social Responsibility

- > As a global leader in renewable energy solutions, SolarEdge is deeply committed to promoting a greener world
- > SolarEdge is in full compliance with international standards on quality and control, ethical conduct and environmental protection



117 awarded patents and 150 additional patent applications

### Product Reliability

- > Long product warranties: 25-year power optimizer warranty and 12-year inverter warranty, extendable to 20 or 25 years
- > SolarEdge products and components undergo rigorous testing, and have been evaluated in accelerated life chambers
- > Reliability strategy includes proprietary application specific ICs (ASIC)

# The Complete SolarEdge Residential Solution

The SolarEdge DC-optimized system provides substantial benefits, including more PV power, higher system visibility, and advanced safety features.

## Power Optimizer

Connects to each solar module on the roof enabling them to perform independently, providing greater energy harvest, enhanced safety, and constant feedback from each module.



## EV Charging Single Phase Inverter

Using SolarEdge's EV charging inverter in solar boost mode (grid + PV), enables electric vehicle charging up to six times faster than with a standard EV charger. The integrated product means less hassle and reduced cost vs. installation of a standalone EV charger and PV inverter. The charger integrates seamlessly with the monitoring platform.



## Monitoring Platform

Use SolarEdge's online monitoring platform to view your system's performance data and receive system alerts. The monitoring platform, which is free for the system's lifetime, offers easy access from mobile devices anytime, anywhere.



## Inverter

The brains of the PV system, the inverter efficiently collects and converts DC energy from the solar modules to AC electricity for use in the home. Small and lightweight, it's ideal for indoor or outdoor installations. The inverter has an optional meter that can also be used to track energy consumption.



Single phase inverter

StorEdge single phase inverter

# SolarEdge Benefits: More Energy From Each Module

## **More Energy: Value for the Homeowner**

More power = more revenue and more savings on electricity bills.

One underperforming solar module connected to a traditional string inverter negatively impacts the performance of an entire string. SolarEdge minimizes this issue by allowing each module to perform to the best of its ability at all times.

In a PV system, each module has an individual maximum power point. Differences between module are unavoidable in PV installations. With traditional inverters, the weakest module reduces the performance of all modules.

With SolarEdge, each module produces the maximum energy, and mismatch-related power losses are eliminated.

## POWER LOSSES CAN RESULT FROM MULTIPLE FACTORS, INCLUDING:

### Manufacturing Tolerance Mismatch

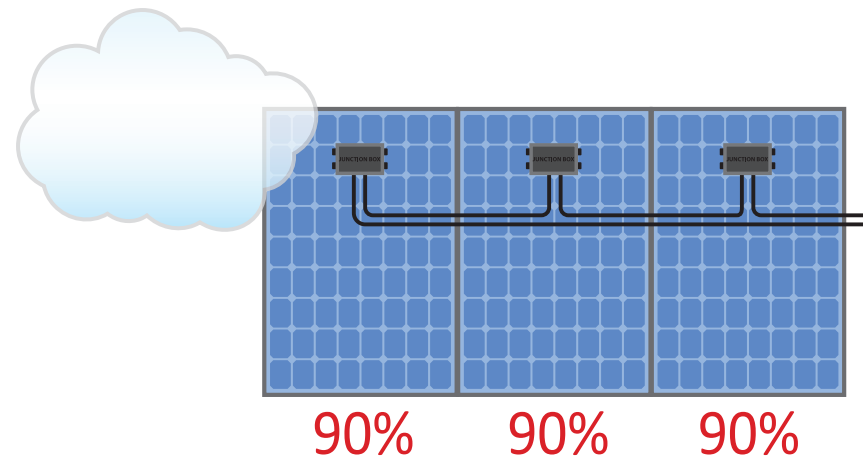
The warranted output power range for PV modules received from a manufacturing plant may vary greatly. A standard deviation of  $\pm 3\%$  is sufficient to result in  $\sim 2\%$  energy loss.



Guaranteed power output from module manufacturers  
**0~+3%**

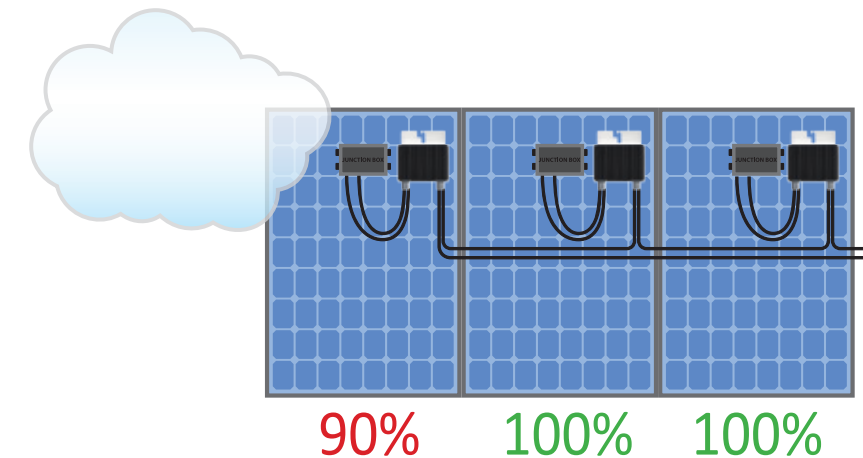
### Soiling, Shading & Leaves

Module soiling, from dirt, bird droppings, or snow contributes to mismatch between modules and strings. While there may be no obstructions during site design, throughout a residential system's lifetime, a tree may grow or a structure may be erected that creates uneven shading.



#### Traditional Inverter

- > One weak module reduces the performance of all modules in the string or is bypassed
- > Power losses occur due to module mismatch



#### SolarEdge System

- > Maximum power is produced and tracked from each module individually
- > More energy is harvested from the PV system



Soiling

Snow

Bird droppings

Leaves

### Uneven Module Aging

Module performance can degrade up to 20% over 20 years, however, each module ages at a different rate, causing aging mismatch, which increases over time.



Source: A. Skoczek et. al., "The results of performance measurements of field-aged c-Si photovoltaic modules", Prog. Photovolt: Res. Appl. 2009; 17:227-240

# SolarEdge Benefits: Superior Safety

## Superior Safety: Value for the Homeowner

For decades now, PV systems have proven to pose minimal safety risks. SolarEdge further improves PV safety with its SafeDC™ feature, designed to reduce your PV system's high voltage to a safe 1 volt per module level whenever the grid is shut off, protecting solar professionals, installers, firefighters and your home.

With Integrated Rapid Shutdown, the SafeDC feature of your SolarEdge inverters will de-energize your PV system to less than 30 volts within 30 seconds meeting the requirement of NEC 2017 & 2017 Rapid Shutdown functionality, section 690.12.

With millions of photovoltaic (PV) systems installed around the world, this technology is designed to be relatively safe and reliable. However, as traditional PV installations can reach voltages as high as 600VDC, precautions should be taken to ensure the safety of people and assets.

Traditional string or central inverters are limited in the safety level they offer installers, maintenance personnel and firefighters. Shutting down the inverter or the grid connection will terminate current flow but electrocution risk remains, since DC voltage in the string cables will stay high for as long as the sun is shining.

In addition, the possibility of electrical arcs, which can result in a fire, creates a threat to the asset on which the PV system is installed, as well as to people who live or work in the vicinity of the PV system.

The SolarEdge system provides a superior safety solution for both electrocution and fire risks.

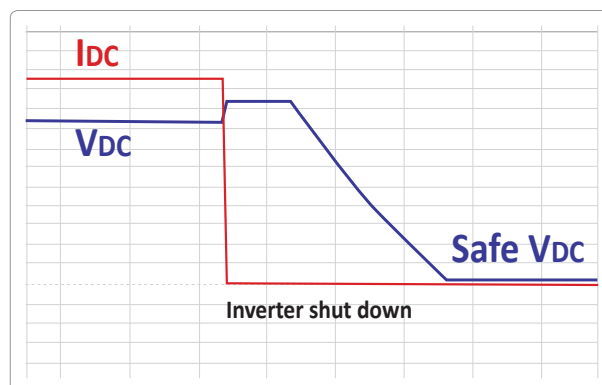
## 1 Volt SafeDC™

SafeDC™ is a built-in module-level safety feature which minimizes electrocution risk. During installation or when the grid or inverter is shut down (including during maintenance), power optimizers are designed to automatically switch into safety mode, in which the output voltage of each module will be reduced to 1V. String voltage will be maintained below risk levels. For example, if 19 power optimizers are connected in series, the string voltage will be 19V.

Module-level shutdown is designed to occur automatically in either of these cases:

- > During installation, as long as the string is disconnected from the inverter, or the inverter is turned off
- > During maintenance or emergency, when the inverter is turned off or when the AC connection of the building is shut down
- > When the thermal sensors of the power optimizers detect a temperature above 85°C

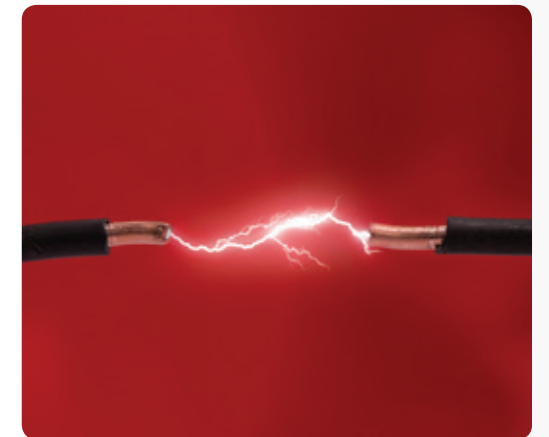
The SolarEdge SafeDC feature is compliant with NEC 2014 & NEC 2017 Rapid Shutdown functionality, section 690.12.



This graph represents an automatic string shutdown. As demonstrated, the current is shut down immediately once AC power or inverter is turned off. The string voltage is reduced to safe voltage within 30 seconds.

## Arc Fault Detection and Interruption

SolarEdge inverters have a built-in protection designed to mitigate the effects of some arcing faults that may pose a risk of fire, in compliance with the UL1699B arc detection standard. The US standard, which came into effect as part of NEC2011, includes requirements for arc detection (i.e. arcs within the string) and for manual, on-site restart after an arc detection event.



POWER OFF



  
Inverter voltage < 30v



# SolarEdge Benefits: Design Flexibility

## **Design Flexibility: Value for the Homeowner**

*SolarEdge combines optimal rooftop usage with an aesthetic design, for more power and more savings. Mix and match module types to easily expand your solar system later.*

are lowered. The size and layout of an array is no longer defined by electrical constraints. Shaded modules do not bring down the entire string performance, and modules power rating, bin, and type can be mixed in multiple orientations or tilts, in the same string.

With SolarEdge's optimized design flexibility, every installation can become more profitable with the ability to sell more modules at no extra customer acquisition and installation costs.



## **More Power, More Revenue & More Aesthetic Rooftops**

The SolarEdge system topology enables efficient use of all available roof space through unprecedented design flexibility. A wide variety of string lengths is possible with no requirement for matching string lengths. With longer strings, the installer's BoS costs

# SolarEdge Benefits: Peace of Mind

## **Peace of Mind: Value for the Homeowner**


*With real-time monitoring of system performance and long product warranties, SolarEdge assists you in protecting your investment and provides you with peace of mind.*



## **Module-Level Monitoring**

SolarEdge delivers free, real-time remote monitoring at the module, string, and system levels, ensuring that the installation is performing to the best of its ability at all times. The Monitoring Platform provides comprehensive analytics tracking and reports of energy yield, system uptime, performance ratio, and financial performance. Pinpointed and automatic alerts for immediate fault detection, accurate maintenance, and rapid response result in minimal and shortened onsite visits. It offers customizable views so that installer can share either system-level or module-level performance.

Numerous communication options exist for connecting SolarEdge inverters to the Monitoring Platform, via

hardwired Ethernet, ZigBee wireless or GSM cellular connections. Access to the Monitoring Platform is easily available from your computer or mobile device, anytime, anywhere. 

## **Protecting the Homeowner's Investment**

As part of residential PV design, it is important to account for future costs that can impact the return on investment of a homeowner's PV system. The SolarEdge DC optimized inverter solution effectively minimizes these potential costs.

> **Replacement:** SolarEdge allows modules of different power classes and brands in the same string. Any module available in the market could fit.

> **Expansion:** New power optimizers and modules can be utilized in the same string with older models.

SolarEdge products are built for long-term performance, with industry-leading warranties of 25 years for power optimizers, 12 years for inverters, and free monitoring for 25 years. Affordable extended inverter warranties of up to 25 years are also available, with low-cost out-of-warranty inverter replacement at ~40% less than traditional inverters.



Power Optimizer

Inverter

Monitoring Platform

# Single Phase Inverters with HD-Wave Technology

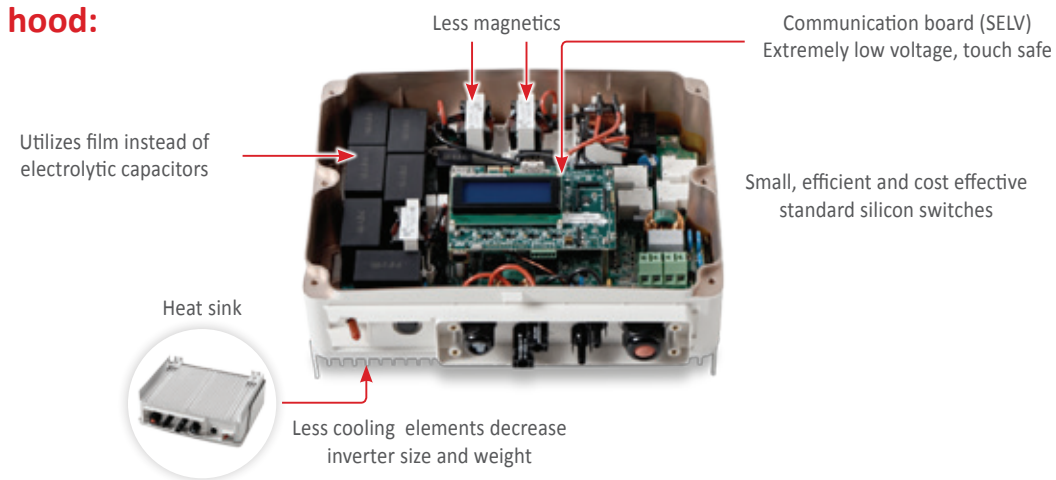
## A NEW ERA FOR INVERTER TECHNOLOGY

Representing one of the most significant leaps in solar technology in the past 20 years, SolarEdge's HD-Wave technology is a novel power conversion topology that significantly decreases inverter size and weight, while also achieving record 99% weighted efficiency.

By employing distributed switching and advanced digital processing to synthesize a clean, high-definition sine wave, inverters with HD-Wave technology have <math><1/2</math> the heat dissipation, 16x less magnetics, and 2.5x less cooling components than current SolarEdge inverters, which are already among the smallest on the market.



### Under the hood:



### Product features:

- **Multiple sizes** with 3kW to 10kW inverter range
- **More energy** from a record 99% weighted efficiency
- **More modules** on the rooftop with up to 155% DC/AC oversizing
- **Longer strings** up to 5,700W (up to 6,000W on SE10000H)
- **Easy installation** due to small size and light weight
- **Improved reliability** with less heat and film capacitors
- **UL1741 SA certified** for CPUC Rule 21 grid compliance
- **Superior safety** with integrated Arc Fault protection and Rapid Shutdown compliant with NEC 2014 & 2017
- **High visibility** with built-in module-level monitoring
- **Optional integrated revenue grade data**, ANSI C12.20 (0.5% accuracy)
- **Comprehensive commissioning** with automatic power optimizer ID and string assignment detection
- **Backward compatibility** with existing SolarEdge systems

# EV Charging Single Phase Inverter

## THE FIRST EV CHARGING INVERTER

Increase your revenue by offering homeowners the EV Charging Single Phase Inverter. It offers users the ability to charge electric vehicles up to six times faster than a standard EV charger through an innovative solar boost mode that utilizes grid and PV charging simultaneously. This product is the first PV inverter integrated with an EV charger on the market.

By installing SolarEdge's EV charging inverter, your customers benefit from the reduced hassle of installing separately a standalone EV charger and a PV inverter. Furthermore, you benefit by eliminating the need for additional wiring, conduit and a breaker installation. By installing an EV charger that is integrated with an inverter, an additional dedicated circuit breaker is not needed, saving space and eliminating a potential main distribution panel upgrade.

Whether your customer owns an EV now or just wants to be EV-ready, drive your business into the future with SolarEdge.

### Full visibility and control:

The EV charging inverter supports full network connectivity and integrates seamlessly with the Monitoring Platform. Homeowners can track their charging status, control vehicle charging, and set charging schedules.

- Smart-scheduling for use with Time of Use (TOU) rates — charge from the grid during off peak hours
- Track PV, EV, and grid consumption for visibility and control of household energy usage
- Remote operation via mobile app — turn charging on and off directly from your smartphone
- View charging duration, charge energy, and percent charge from PV

<sup>(1)</sup> Monitoring connection is also required for first-time EV charging

<sup>(2)</sup> Cable and connector are not included



### Product features:

- Combines sun and grid power for charging up to six times faster than existing electrical infrastructure
- Fully integrated with the Monitoring Platform<sup>(1)</sup>
- Reduces workload and costs of installing separately a standalone EV charger and a PV inverter
- Built-in meter enables separate tracking of EV power usage for visibility and control
- 12-year warranty<sup>(2)</sup>, extendable to 20 or 25 years
- Optional built-in Revenue Grade Meter (RGM)
- Saves space on main distribution panel to avoid potential upgrade
- Demand-Response ready



# How to Sell SolarEdge

As a SolarEdge installer, you already know that a DC optimized inverter system can increase revenue, decrease expenses, and minimize risk for your business. But how is the SolarEdge advantage best explained to homeowners? Here's a breakdown of the benefits.



## Benefit 1 > More Energy from the Sun

### For the Homeowner:

Similar to Christmas tree lights, in which one failed bulb knocks out an entire string, one underperforming solar module connected to a traditional string inverter will negatively impact the performance of an entire string. SolarEdge eliminates this issue by allowing each module to perform to the best of its ability at all times. More power = more savings on your energy bill.

### The Details:

SolarEdge power optimizers provide module-level MPP tracking and real-time current and voltage adjustments to achieve the optimal working point of each PV module. By enabling each module to continuously produce its maximum power potential independent of other modules in the same string, SolarEdge minimizes module mismatch and partial shading losses. Even on rooftops with no shading, module mismatch from snow, soiling, leaves, and bird droppings can cause a system to underperform over time.



## Benefit 2 > Design Flexibility

### For the Homeowner:

Get the solar design you want, where you want it. SolarEdge enables the best possible rooftop utilization, resulting in more energy and more savings. Are you planning on adding to your array down the road? SolarEdge allows installers to mix and match module types, giving you the option to easily expand your system at a later date.

### The Details:

SolarEdge allows for a wide variety of string lengths from a minimum of 6 modules—up to a maximum of 6,000 watts—with no requirement for matching string lengths. The size and layout of an array is no longer defined by electrical constraints. Shaded modules do not bring down the entire string performance, and module size, bin, and type can be mixed in any orientation or tilt.

## Benefit 3 > Free Online Monitoring

### For the Homeowner:

A solar PV system without monitoring would be like a car without a dashboard. How fast are you driving? Do you have enough gas? When should you change the oil? The SolarEdge Monitoring Platform provides real-time visibility into the performance of your solar array and is accessible from any computer, smartphone or tablet.

### The Details:

SolarEdge offers free online monitoring for 25 years, reducing maintenance costs throughout a system's lifetime. Installers can offer homeowners monitoring at the module or system level to easily assess performance in real-time. Demo monitoring accounts are available on the Monitoring Platform to showcase the functionality of online monitoring to customers.



## Benefit 4 > Enhanced Safety and Reliability

### For the Homeowner:

**Safety:** Rest easily with SolarEdge's SafeDC™ feature. Your system will automatically de-energize whenever an inverter or the AC power is switched off, enhancing the safety of solar professionals, firefighters and your home.

**Reliability:** Compared to a traditional string inverter, SolarEdge inverters live an easy life. SolarEdge power optimizers are warrantied for 25 years, and our warranty extension and out-of-warranty inverter replacement options are some of the most affordable of any string inverter.

### The Details:

Power optimizers and DC cables are designed to drop to 1V DC if the inverter is off, providing protection to installers, maintenance personnel, firefighters, and property. Integrated Arc Fault Protection (Type 1) for NEC 2011 690.11 is standard, and Rapid Shutdown functionality per NEC 2017 690.12 is also available.

SolarEdge carries best in class warranties: 25 years for power optimizers and 12 years for inverters. Including the extended inverter warranty in the sales price to a homeowner allows the entire system to be warrantied for up to 25 years.



# 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, battery storage and backup power. The StorEdge solution is compatible with high voltage batteries from LG Chem.

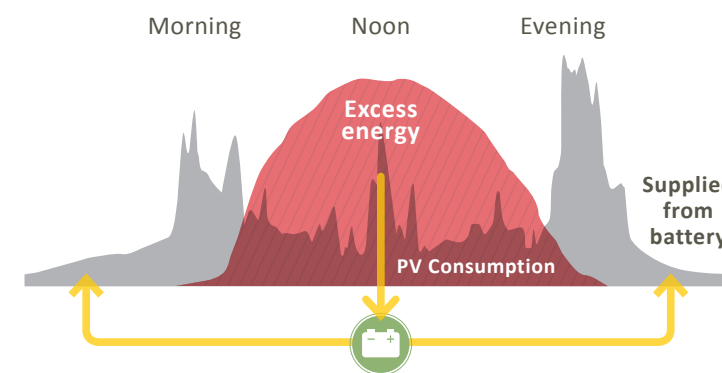
 LG Chem **RESU**



## BASIC APPLICATIONS

### 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.

#### Providing backup power day or night



Charge battery from the PV system



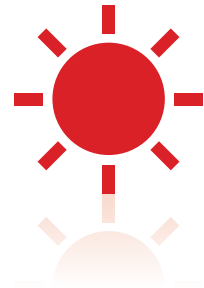
Daytime: Important loads are powered first by the PV system and then by the battery. The battery can be charged from the PV as needed



Nighttime: Important loads are powered by the battery

# 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
- > Supports multiple inverter/battery installations



## Full Visibility & Easy Maintenance

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

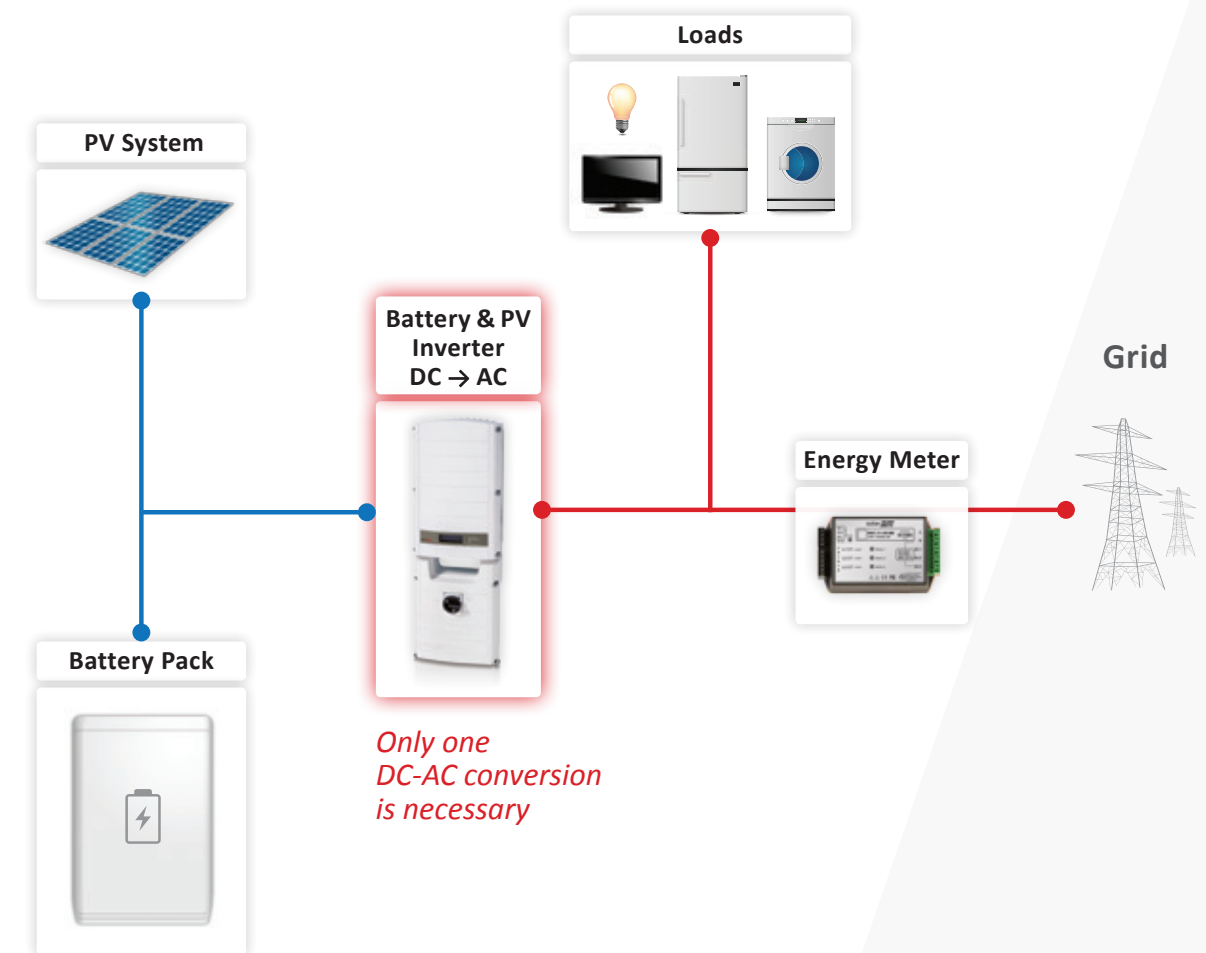


## Enhanced Safety



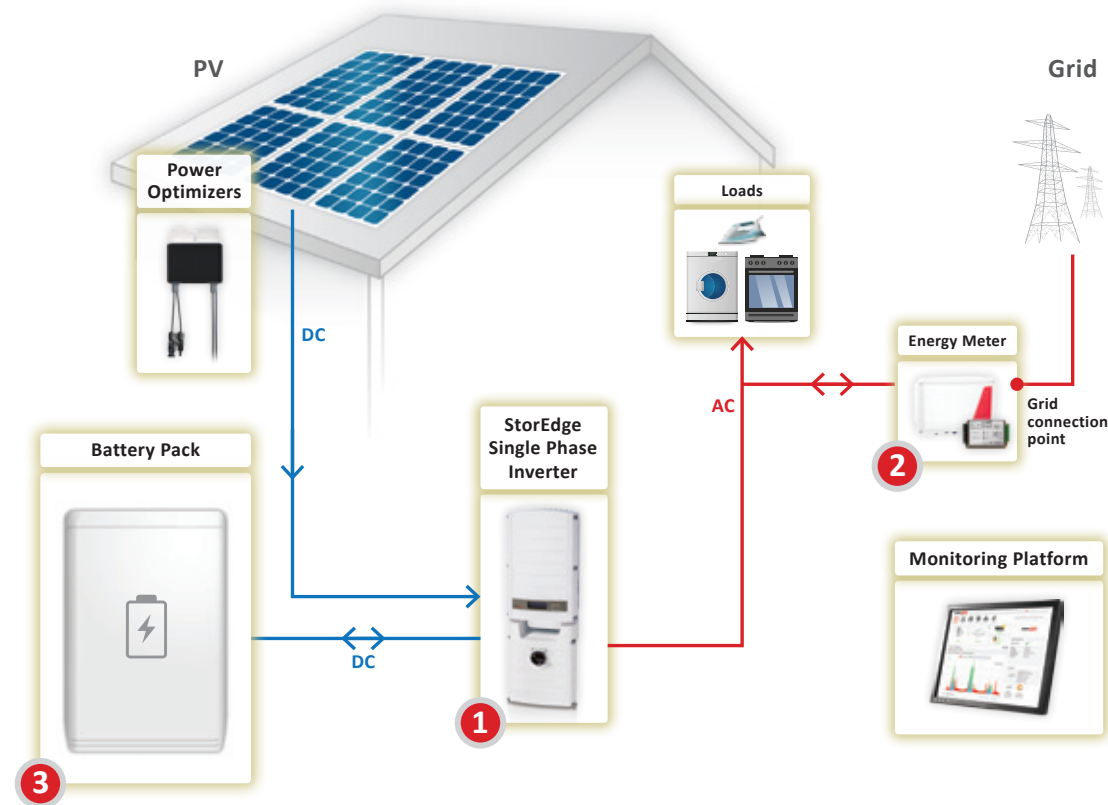
- > PV array and battery voltage reduced to a safe voltage automatically upon AC shut down when not in backup mode
- > Integrated Arc Fault protection and Rapid Shutdown compliant with NEC2014 & 2017

## PV System with DC-Coupled Storage solar<sub>edge</sub>



# Basic StorEdge DC-Coupled Applications

## Optimizing Self-Consumption



1

### StorEdge Single Phase Inverter

The StorEdge single phase inverter manages battery and system energy, in addition to its functionality as a DC-optimized PV inverter

2

### Energy Meter & Current Transformers

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

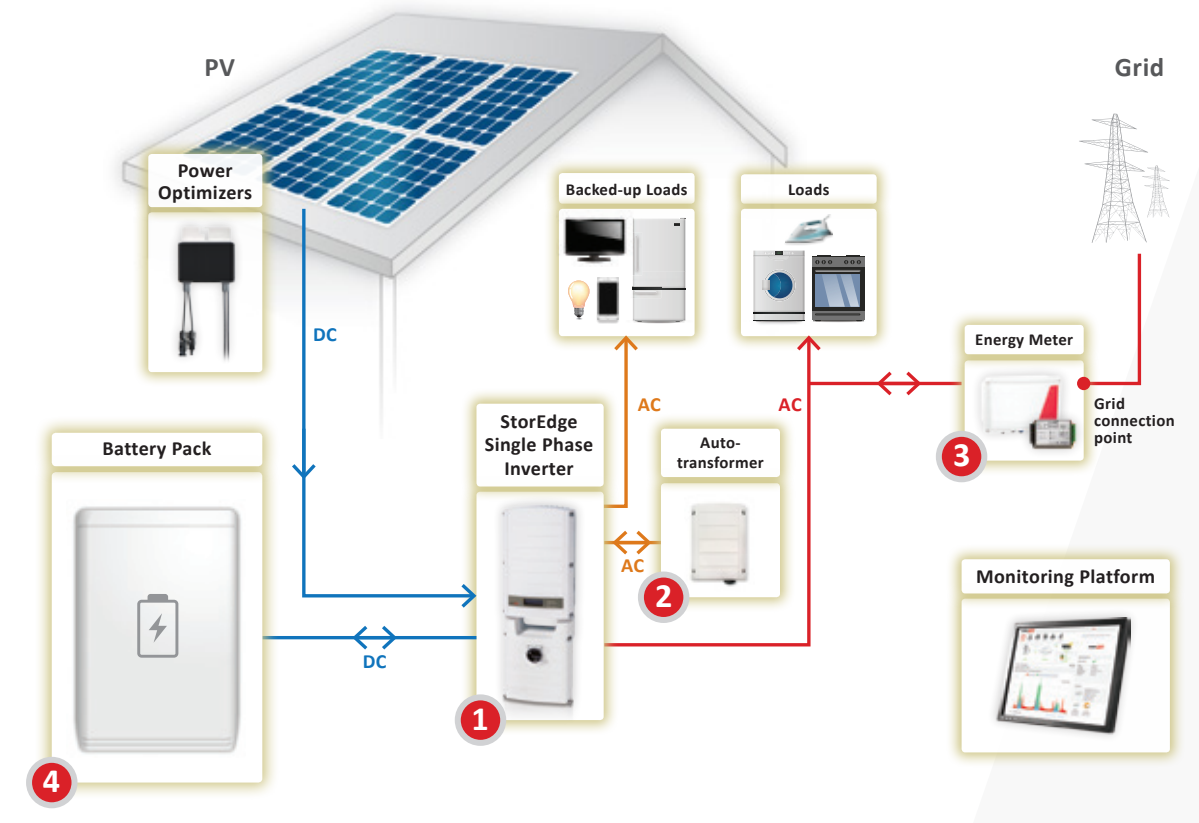
3

### Battery Pack

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



## Optimizing Self-Consumption + Backup



1

### StorEdge Single Phase StorEdge Inverter

The StorEdge Single Phase Inverter manages battery and system energy, in addition to its functionality as a DC-optimized PV inverter

2

### Auto-Transformer

Needed for backup power applications. Connects to the StorEdge Inverter to enable split phase balancing for 120V loads

3

### Energy Meter & Current Transformers (Optional)

Only needed for on-grid applications such as export limitation, demand response and peak shaving, and time of use shifting. Integrates with the StorEdge Inverter and Monitoring Platform

4

### Battery Pack

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



# Advanced StorEdge Applications

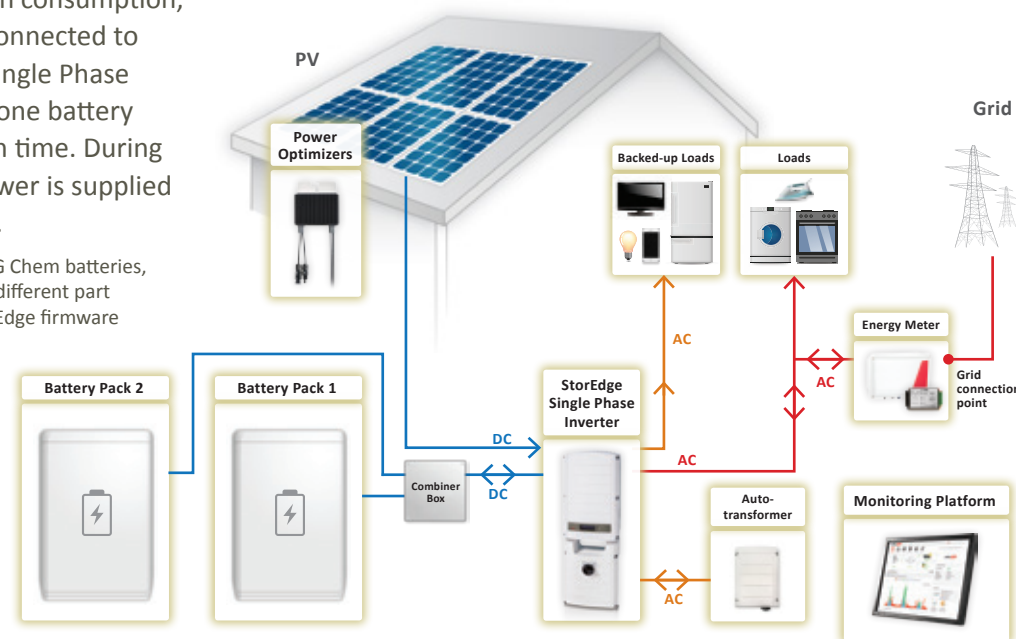
The StorEdge system can be modified to provide homeowners with a solution specific to their energy requirements.

Homeowner Requirement	Details
<p><b>1 DC-Coupled Large Systems</b></p>	<p>Connect two batteries to a single StorEdge inverter, with only one battery operating at a given time</p>
<p><b>2 AC-Coupled Self-Consumption</b></p>	<p>Existing SolarEdge PV systems can be AC-coupled to a StorEdge inverter for maximized self-consumption.</p>

## 1 DC-Coupled Large Systems\*

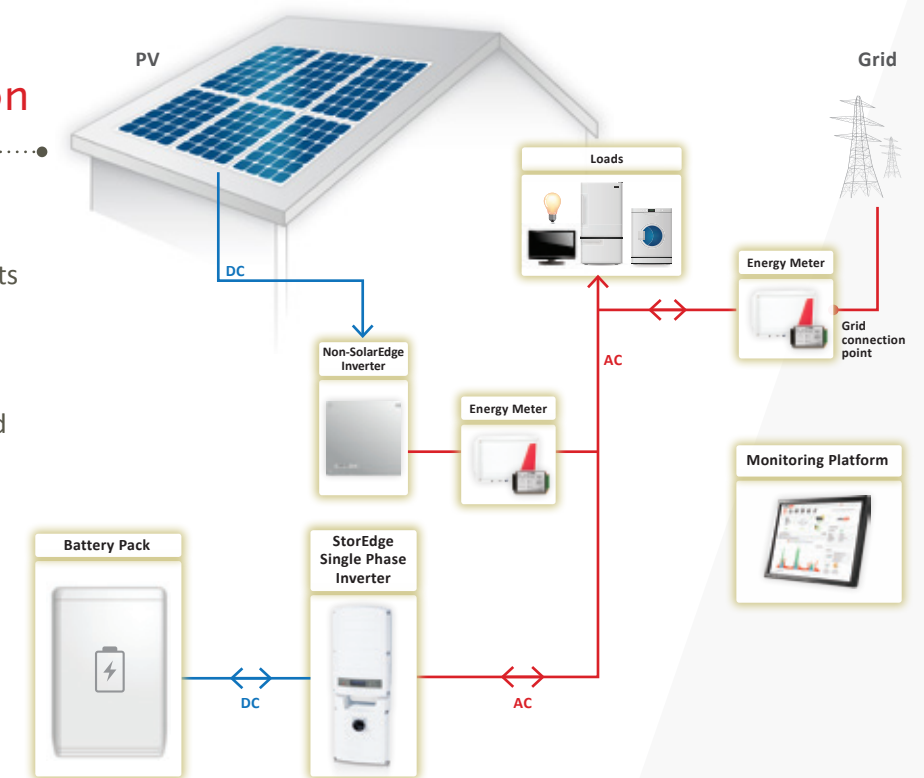
For homes with high consumption, two batteries are connected to a single StorEdge Single Phase Inverter, with only one battery operating at a given time. During power outages, power is supplied to backed up loads.

\* When connecting two LG Chem batteries, each battery must have a different part number; supporting SolarEdge firmware required



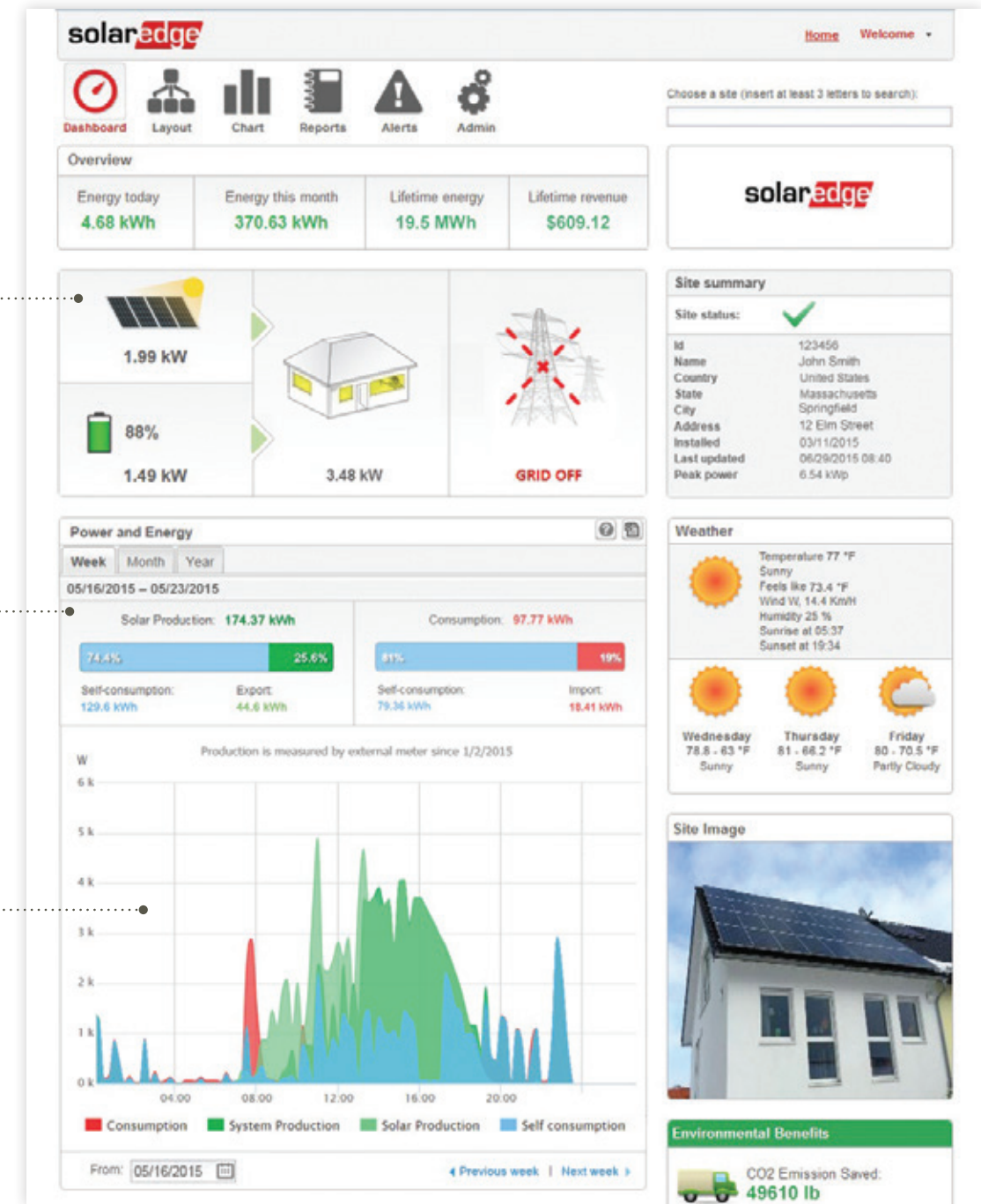
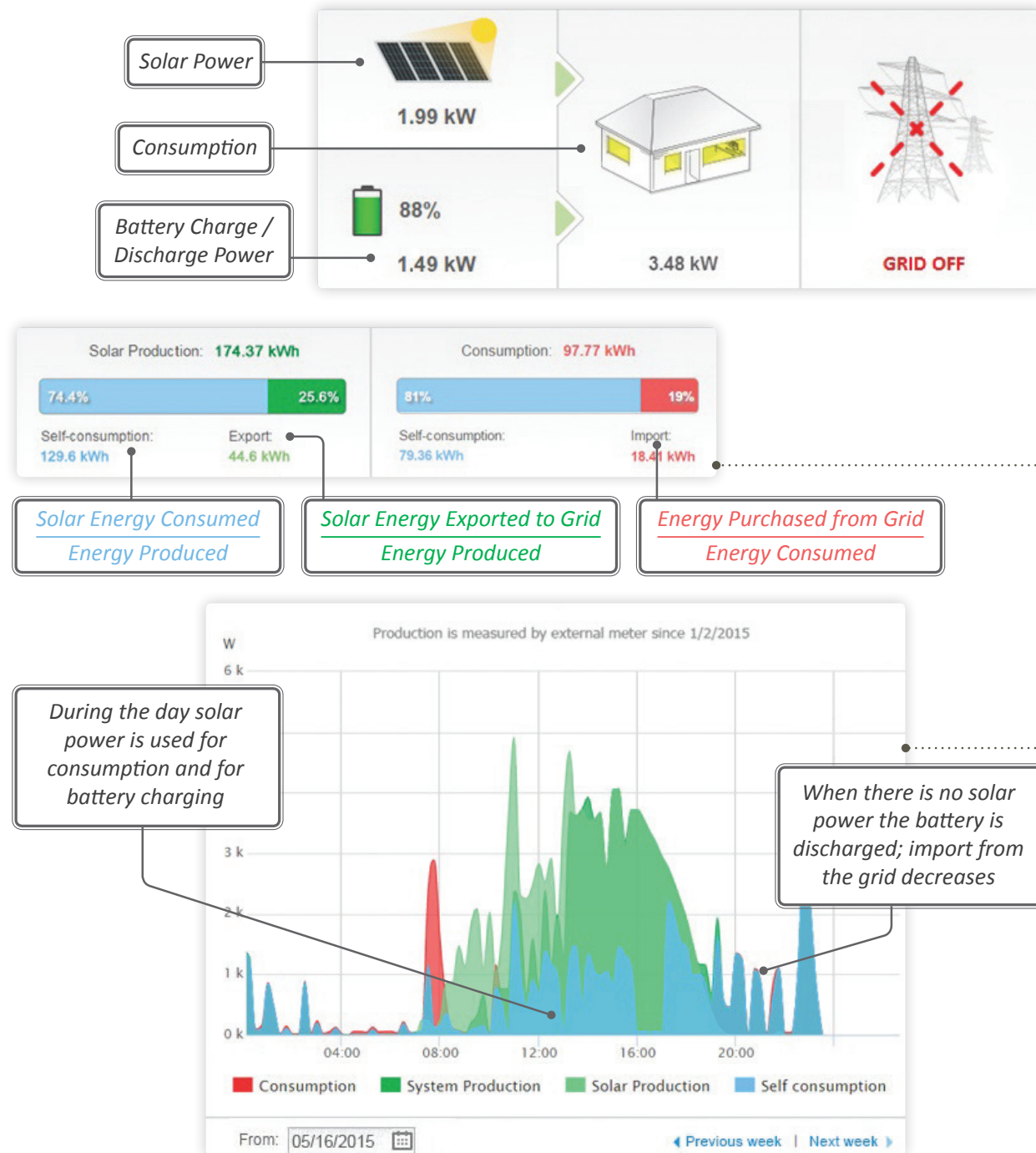
## 2 AC-Coupled Self-Consumption

To upgrade existing PV installations, the StorEdge Single Phase Inverter connects to the existing inverter's AC output (AC-coupled). The inverter charges the battery using the PV power produced by the existing inverter.



# SolarEdge Monitoring Platform

The SolarEdge 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.



Monitoring Platform dashboard

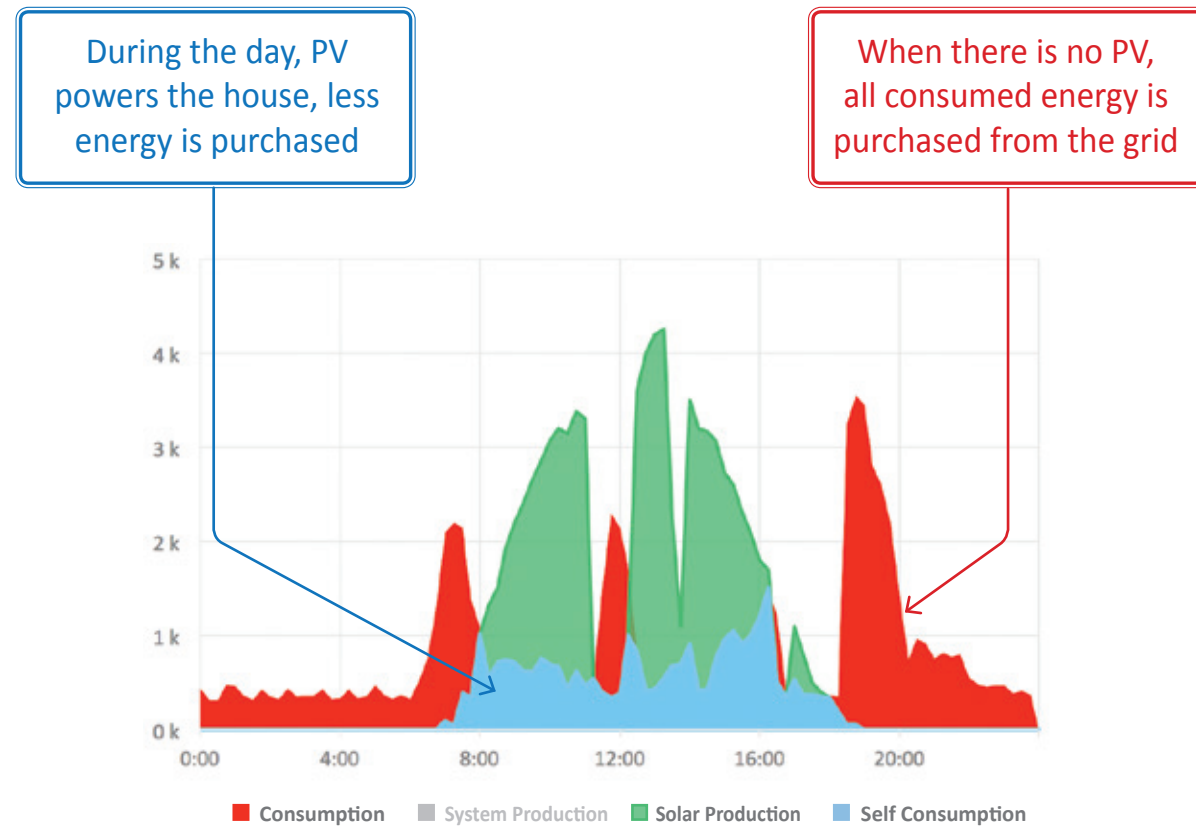
# StorEdge Case Study: Increasing Self-Consumption

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%

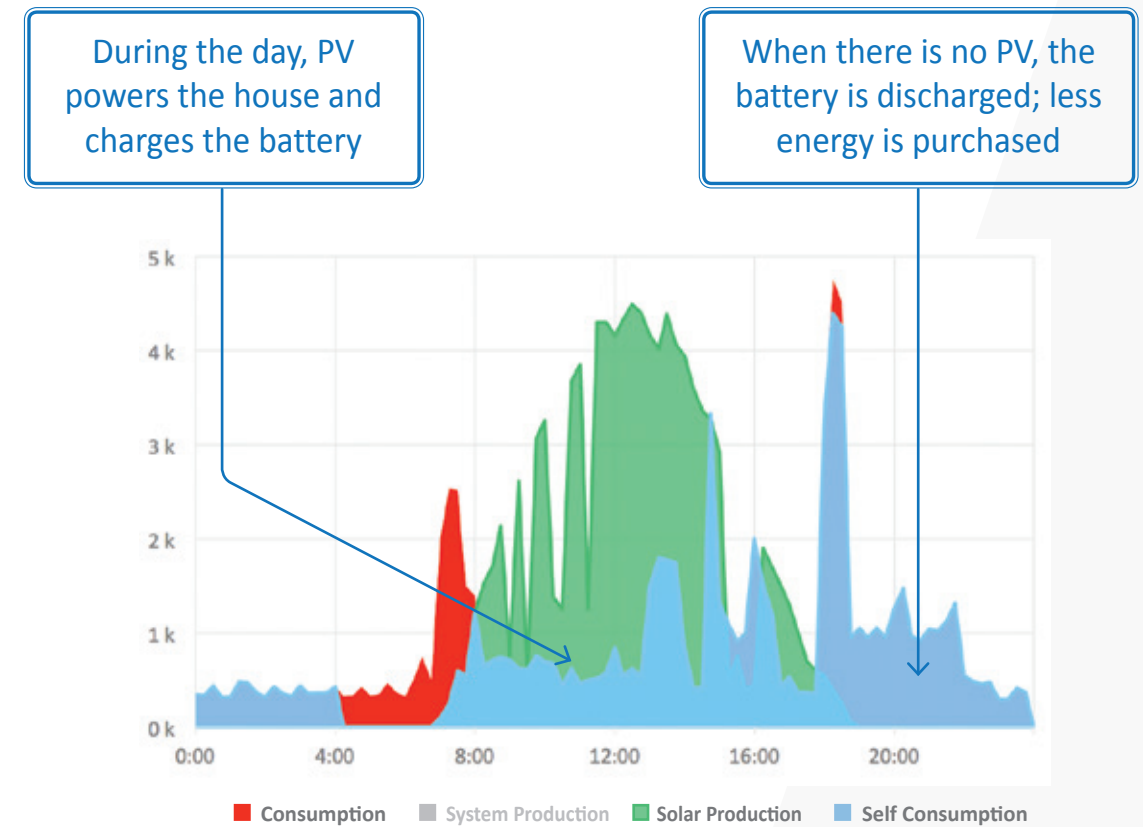


\*Based on a SolarEdge 5kW residential PV system

## 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 Ordering Information

Contact your local SolarEdge distributor

Part Number	Product Description	
<b>► Single Phase Inverters; 12-year warranty included</b>		
SE3000H-US000NNU2	1ph Inverter, with HD-Wave Technology, 3.0kW, (-25°C)	
SE3800H-US000NNU2	1ph Inverter, with HD-Wave Technology, 3.8kW, (-25°C)	
SE5000H-US000NNU2	1ph Inverter, with HD-Wave Technology, 5.0kW, (-25°C)	
SE6000H-US000NNU2	1ph Inverter, with HD-Wave Technology, 6.0kW, (-25°C)	
SE7600H-US000NNU2	1ph Inverter, with HD-Wave Technology, 7.6kW, (-25°C)	
SE7600A-US002NNU2	1ph Inverter, 7.6kW, (-25°C)	
SE10000A-US-U	1ph Inverter, 10.0kW, (-25°C)	
SE11400A-US-U	1ph Inverter, 11.4kW, (-25°C)	
SE10000H-US000NNU2	1ph Inverter, with HD-Wave Technology, 10.0kW, (-25°C)	
SE11400H-US000NNU2 (Coming Soon)	1ph Inverter, with HD-Wave Technology, 11.4kW, (-25°C)	
<b>► Single Phase Inverters with Built-In RGM; 12-year warranty included</b>		
SExxxxH-US000NNC2	1ph Inverter, with HD-Wave Technology	* For built-in RGM (C12.20) use the suffix C2
SExxxxA-US00xNNC2	1ph Inverter	
<b>► Single Phase Inverters (-40°C); 12-year warranty included</b>		
SExxxxH-US000NNU4	1ph Inverter, with HD-Wave Technology	* For -40°C use the suffix U4
SExxxxA-US00xNNU4	1ph Inverter	
<b>► COMING SOON: EV Charging Single Phase Inverter; 12-year warranty included</b>		
SE3800H-US000NNV2	EV Charging 1ph Inverter with HD-Wave Technology, 3.8kW, (-25°C) * EV Charger cable and holder sold separately	* For built-in RGM (C12.20), use the suffix W2
SE7600H-US000NNV2	EV Charging 1ph Inverter with HD-Wave Technology, 7.6kW, (-25°C) * EV Charger cable and holder sold separately	
SE-EVCBL-15J40	EV Charger Cable, 40A, 15' cable length	
SE-EVCBL-25J40	EV Charger Cable, 40A, 25' cable length	
<b>► StorEdge; 12-year warranty included</b>		
SE3800A-USS20NHB2	StorEdge 1ph Inverter (with Backup), with GSM Plug-in and Data Plan, 3.8kW	
SE7600A-USS20NHB2	StorEdge 1ph Inverter (with Backup) for Higher Power Output, with GSM Plug-in and Data Plan, 7.6kW	
SE3800A-USS20NHY2	StorEdge 1ph Inverter (with Backup), with GSM Plug-in and Data Plan, with RGM (C12.20), 3.8kW	
SE7600A-USS20NHY2	StorEdge 1ph Inverter (with Backup) for Higher Power Output, with GSM Plug-in and Data Plan, with RGM (C12.20), 7.6kW	
SEAUTO-TX-5000	5KVA Auto-transformer	
SE-MTR240-0-000-S2	1ph, 240V Energy Meter, NEMA3R, (CT sold separately)	
SEACT0750-200NA-20	200A CT, Box of 20	
SEACT1250-400NA-20	400A CT, Box of 20	



Part Number	Product Description	
<b>► Power Optimizers; 25-year warranty included</b>		
P320	For 60-cell modules, 320W/48V, MC4 Input (box of 20)	
P370	For high power 60 and 72-cell modules, 370W/60V, MC4 Input (box of 20)	
P400	For 72 and 96-cell modules, 400W/80V, MC4 Input (box of 10)	
P405	For Thin Film modules, 405W/125V, MC4 Input (box of 10)	
P505	For high current modules, 505W/83V, MC4 Input (box of 10)	
<b>► Frame-Mounted Power Optimizers; 25-year warranty included</b>		
P320-5NC4AFS	For 60-cell modules, 300W/48V Input-MC4-Compatible (box of 10)	
<b>► Communication Products; 5-year warranty included</b>		
SE1000-ZBGW-K5-NA	ZigBee Gateway + ZigBee Plug-in	
SE1000-ZBRPT05-NA	ZigBee Repeater (range extender)	
SE1000-ZB05-SLV-NA	ZigBee Plug-in	
SE1000-RS485-IF-NA	RS485 Plug-in, provides additional RS485 connector	
SE-GSM-R05-US-S1	GSM Plug-in, with 5-Year Prepaid Data Plan, US residential systems only	
SE-GSM-R05-US-S2	GSM Plug-in, with 5-Year Prepaid Data Plan, US StorEdge systems only	
SE-GSM-R05-NA-S1	GSM Plug-in, with 5-Year Prepaid Data Plan, US & Canadian residential systems only	
SE-GSM-R05-NA-S2	GSM Plug-in, with 5-Year Prepaid Data Plan, US & Canadian StorEdge systems only	
SE-GSM-R12-US-S1	GSM Plug-in, with 12-Year Prepaid Data Plan, US residential systems only	
SE-GSM-R12-US-S2	GSM Plug-in, with 12-Year Prepaid Data Plan, US StorEdge systems only	
SE-GSM-R12-NA-S1	GSM Plug-in, with 12-Year Prepaid Data Plan, US & Canadian residential systems only	
SE-GSM-R12-NA-S2	GSM Plug-in, with 12-Year Prepaid Data Plan, US & Canadian StorEdge systems only	
<b>► Accessories</b>		
SE-GNDLUG5-100	Grounding Lugs for 100 Power Optimizers	
SE-GNDPLATE-100	Grounding Plates for 100 Power Optimizers	
FLD-KIT-1PH-NA	Field Service Kit for NA 1ph Inverter (requires training)	
<b>► Inverter Warranty Extensions</b>		
Please refer to <a href="https://www.solaredge.com/us/service/warranty">https://www.solaredge.com/us/service/warranty</a>		
<b>► Display Products</b>		
SE7600H-US-EMP-U	Demo 1ph Inverter with HD-Wave Technology, for units up to 7.6kW	
SE10000H-US-EMP-U	Demo 1ph inverter with HD-Wave Technology, for 10-11.4kW units	
SE7600H-US-EVC-EMP (Coming Soon)	Demo EV Charging 1ph Inverter with HD-Wave Technology	
SE7600A-USS-EMP	Demo StorEdge 1ph Inverter (with Backup)	
INV-STND-RED	Red inverter stand for demo inverters	









SolarEdge invented an intelligent inverter that has changed the way power is harvested and managed in PV systems. The SolarEdge DC optimized inverter maximizes power generation at the individual PV module-level while lowering the cost of energy produced by the PV system.

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 monitoring. By connecting power optimizers to each module, the system enables superior power harvesting and module management. System costs remain competitive by centralizing the DC-AC inversion and grid interaction at a simplified PV inverter. Enhanced PV asset management including reduced O&M costs are enabled through module-level monitoring and remote troubleshooting. Another benefit is the automatic DC shutdown, for installer, maintenance personnel, and firefighter safety, through the SafeDC™ mechanism.

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