

Smarter Energy Usage with StorEdge®



Integrating solar with battery storage is changing the way homeowners consume energy, and creates additional opportunities for solar installers to grow their business. By storing excess solar production on a battery, homeowners can take control of their energy consumption.



Maximize Solar Usage

Excess solar production is stored on a battery, for use when needed, day or night



Lower Electricity Bills

Use battery storage to help power the home and purchase less or cheaper electricity from the grid



Increase Energy Independence

Reduce grid reliance and protect homeowners from rising electricity costs

/ Optimize SolarEdge Installations with StorEdge

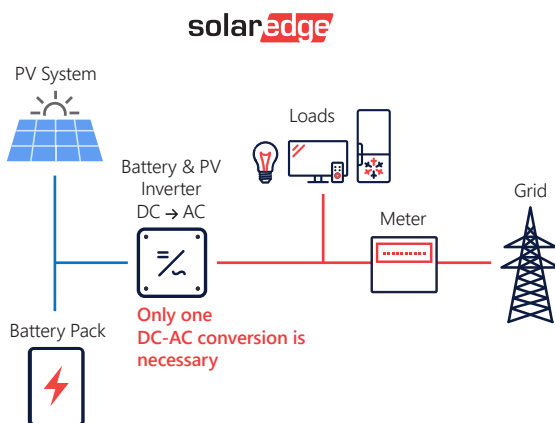
Combining SolarEdge's breakthrough solar inverter technology with leading battery storage systems, the StorEdge DC-coupled solution is powered by a single inverter and offers higher energy production, advanced safety, and module-level visibility.

StorEdge Benefits

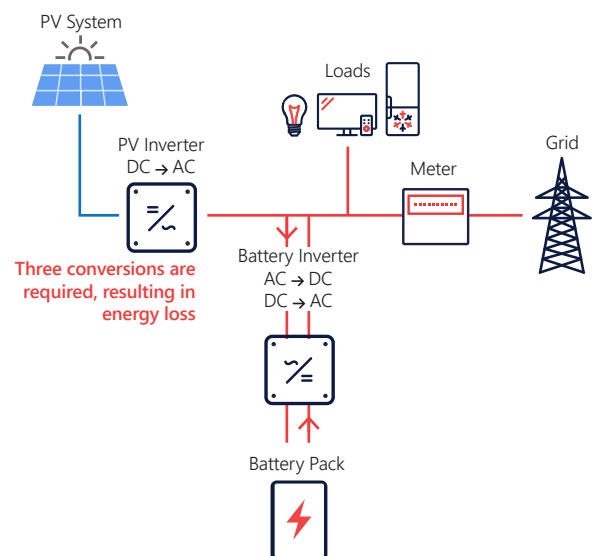
More energy

- / Module-level power optimization for higher energy yield
- / DC-coupled solution for high system efficiency
 - Solar energy is stored directly in the battery
 - No additional conversions from AC to DC and back to AC

PV System with DC-Coupled Storage



PV System with AC-Coupled Storage



Simple design & installation

- / A single, smart inverter for both solar and storage
- / Suitable for indoor and outdoor installation
- / No special wires are required — utilizes the same PV cables

Full visibility and easy maintenance

- / Monitor battery status, solar production, and self-consumption data from SolarEdge's monitoring platform
- / Remote diagnostics and firmware upgrades to both inverter and battery
- / Immediate onsite verification for battery connection and configuration

Advanced safety

- / Solar array and battery voltage designed to automatically reduce to touch-safe voltage upon AC shut down
- / Compliant with the most advanced safety regulations such as IEC 60947

/ StorEdge On-Grid Solutions

Increase homeowner's energy independence by automatically utilizing a battery to store and supply power to meet household energy demands. Compatible with high voltage LG Chem RESU batteries as well as 48V batteries supplied by multiple battery vendors.

Lower grid consumption

- // Battery is discharged when the sun is down or solar power is insufficient
- // The amount of power purchased from the grid is reduced, increasing homeowner energy independence and savings

Avoid high electricity tariffs

- // Program StorEdge to operate according to different charge/discharge Time of Use profiles
- // Homeowners can charge the battery when electricity prices are low and discharge to supply the house when prices are high



A Solution for Every Home

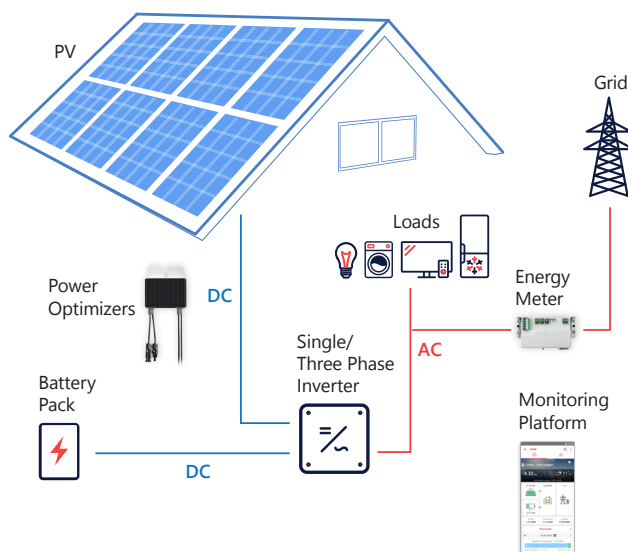
New StorEdge installations

Single phase homes

A StorEdge single phase inverter with HD-Wave technology manages PV, household consumption, and battery power.

Three phase homes

A StorEdge three phase inverter connects directly to one or more 48V batteries, and manages PV, consumption, and battery power.



Upgrading existing installations to StorEdge

Single phase SolarEdge homes

A StorEdge interface is installed, connecting the battery to the single phase inverter.

Three phase SolarEdge homes

A single phase SolarEdge AC-coupled inverter is installed for battery charging, connecting to the three phase inverter's AC output.

Homes powered by a third-party inverter

The single phase SolarEdge AC-coupled inverter is installed for battery charging, connecting to the third-party inverter's AC output. The SolarEdge energy meter provides full system monitoring.

/ StorEdge Backup Solution

In addition to on-grid capabilities, StorEdge can also power critical household loads when the grid goes down, day or night.

- / The single phase StorEdge inverter manages PV, consumption, battery and backup power
- / Compatible with high voltage LG Chem RESU batteries

Note: Check with your local SolarEdge sales person if backup capability is available in your region.

/ Full System Monitoring

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.

