StorEdge™: Backup Power and Self-Consumption

StorEdge is SolarEdge’s all-in-one solution that uses a single on-grid DC optimized inverter to manage and monitor both solar generation and energy storage. Homeowners are automatically provided with backup power in the event of grid interruption to power pre-selected loads. Solar energy can be stored in a battery for on-grid applications such as meeting export limitations, offering demand response and peak shaving, and performing time of use shifting for reduced electric bills.

1. More Energy
   - Module-level power optimization for more power harvesting
   - AC or DC coupled solution allows high system efficiency and maximum flexibility
   - PV power is stored directly in the battery
   - No additional conversions from AC to DC

2. Simple Design & Installation
   - A single inverter for grid-tied solar, backup power, and on-grid applications
   - Inverter and auto-transformer enable automatic disconnection from the grid
   - Outdoor installation allows flexibility in battery location
   - No special wires are required → utilize the same PV cables

3. Enhanced Safety
   - Integrated Rapid Shutdown functionality
   - Low current during operation
   - No high voltage or current during installation and maintenance

4. Full Visibility
   - Monitor the battery status, PV production and self-consumption
   - Smarter energy consumption to reduce electricity bill
   - Monitor remaining hours of backup energy
   - Easy access to the inverter during maintenance (outdoor installation)
The StorEdge solution is based on the SolarEdge StorEdge™ Inverter, Auto-transformer and Electricity Meter.

**SolarEdge StorEdge Inverter**
Manages and monitors battery and system energy, in addition to its traditional functionality as a DC-optimized PV inverter.

**Auto-Transformer (Optional)**
Only needed for backup power applications. Connects to StorEdge inverter to enable split phase balancing for 120V loads.

**Battery Pack**
Compatible with DC coupled, high-voltage and high-efficiency batteries from LG Chem.

**SolarEdge Electricity Meter (Optional)**
Only needed for on-grid applications such as export limitation, demand response and peak shaving, and time of use shifting. Integrates with the SolarEdge inverter and monitoring platform.

Dashboard from the SolarEdge cloud-based monitoring platform.