



# RESIDENTIAL OFFERING

For Installers





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# SolarEdge Home

A personal home energy ecosystem. Designed to adapt to homeowners' changing energy needs, preferences, and lifestyle, day and night.

## More Energy

Gain a competitive edge in a crowded marketplace. Whether your customers are looking for a cost-saving basic solar solution that's scalable and future-ready, or a complete smart home energy management solution - SolarEdge Home covers it all.

## Single Trusted Solution

Streamline your business with a complete solar, storage, and smart energy management solution from a single trusted vendor. We are your one-stop-shop for everything you need to grow your business.

## Ease of Installation

Reduce installation time and minimize the risk of errors with the SolarEdge Home Network, a wireless communication platform that seamlessly connects devices within the SolarEdge Home, overcoming distance and physical limitations.

## Future-Ready System

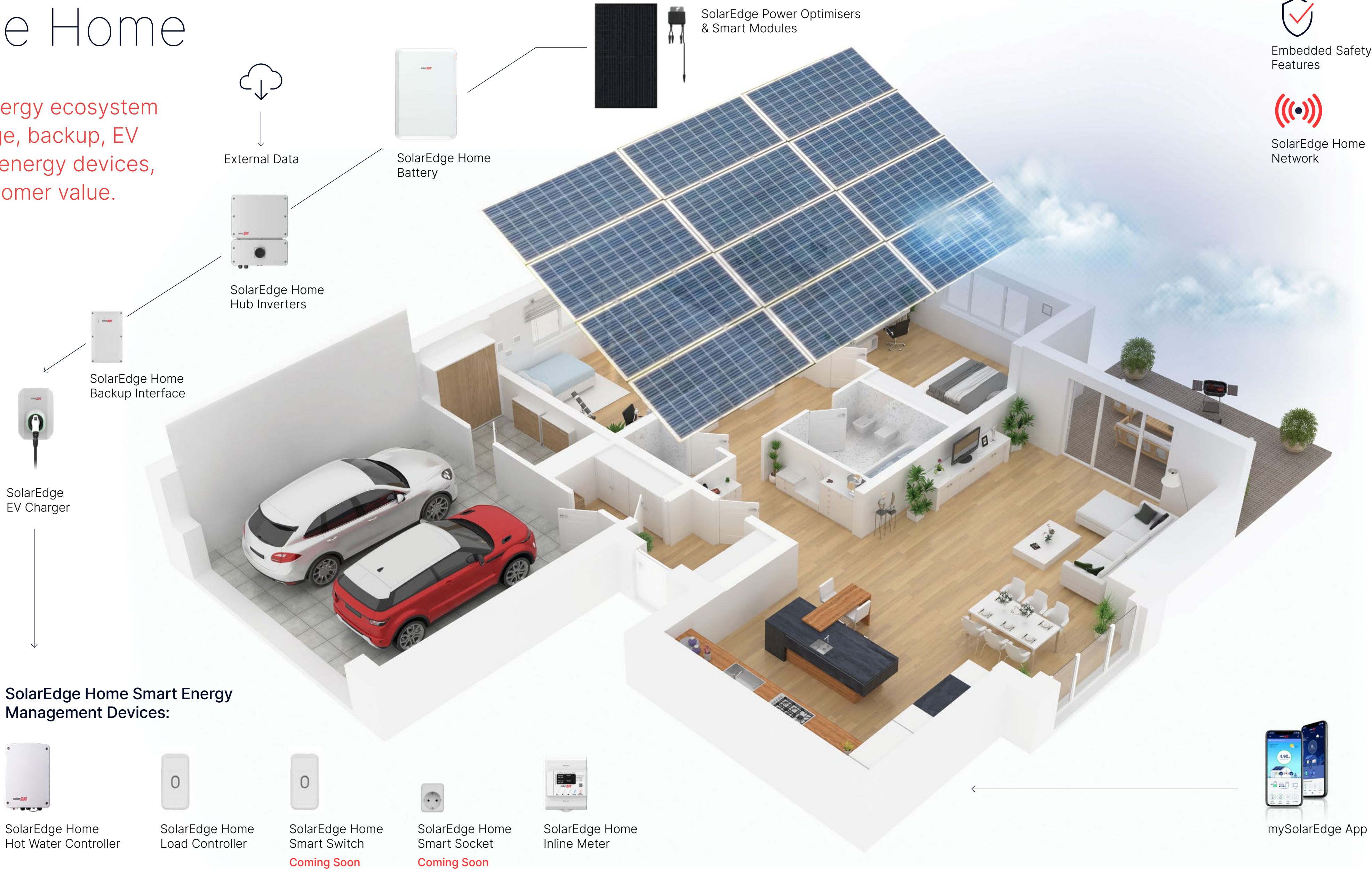
Go beyond PV and grow your business by offering additional smart energy solutions like battery storage and EV charging. "Grow-as-you-go" lets homeowners add new devices anytime they like.





# SolarEdge Home

A complete smart energy ecosystem combining PV, storage, backup, EV charging, and smart energy devices, for even greater customer value.





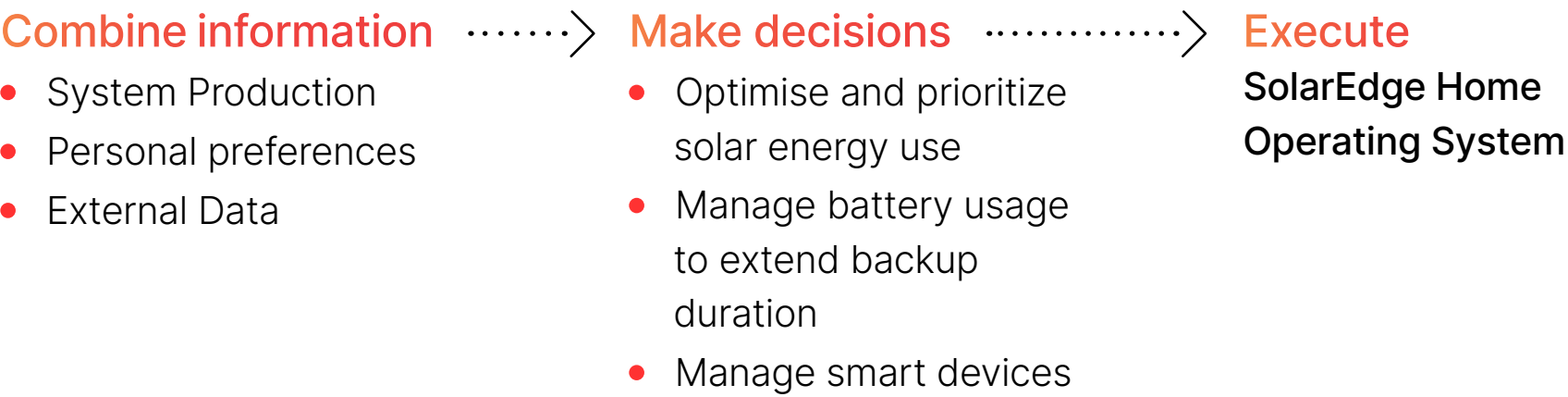
# SolarEdge Home Operating System

**24/7** Smart decision maker to Optimise home energy.

An intelligent software that is in charge of smartly optimising the home's energy distribution in order to:

- Reduce electricity costs
- Optimise solar production and usage
- Extend backup power

## How Does the Operating System Work?





# SolarEdge Power Optimisers

maximise the amount of power each solar module produces and mitigate all types of module mismatch-loss, from manufacturing tolerance to partial shading and aging.



## The S-Series Power Optimisers

Our newest generation of Power Optimisers provide advanced safety with Sense Connect technology, simplified wiring and smart remote monitoring.

### Key Benefits:

#### Smart

- **Module-level visibility:** Monitors the connectors while the PV system is producing energy providing 100% system visibility
- **Designed to meet evolving module requirements:** Supports higher wattage modules, such as the M10, for maximum power density

#### Simple


- **Simpler installation:** simplified layout for easier cable connections (3 short cables + 1 long cable), preventing the connector from dangling on the roof and being exposed during wet weather

#### Safe

##### Enhanced safety suite:

- The new SolarEdge Sense Connect technology\* monitors connectors to prevent electric arcs
- SolarEdge SafeDC™ reduces DC to touch-safe levels during grid failures or when the inverter is down

**S-Series models:** S440, S500, S500B

 S440-S500B

\* Please refer to the datasheet for compatible inverters

# SolarEdge Smart Modules

Integrated with our Power Optimisers for maximum power generation. Enabling faster installations and simplified logistics.

 415W Smart Panel

### Key Benefits:

- Premium PV modules to boost performance & aesthetics
- Easier installation due to pre-installed Power Optimiser
- Half-cut cell technology for more energy generation
- One vendor for service, warranty, software, and training

\* For expected availability in your region, please check with your local SolarEdge representative.



### Homeowner Value:

Power Optimisers allow each solar module to achieve peak performance, improving the overall efficiency of the solar system. Shading, soiling, aging and different tilts do not interfere with solar generation as with other systems. Protect your family and home with patented SolarEdge safety features, such as SafeDC™ and Sense Connect technology.



# SolarEdge Home Genesis Inverters\*

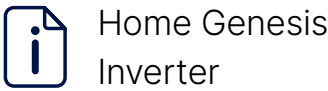
Combining award-winning technology, our inverters seamlessly manage PV production, on-grid battery storage, EV charging and our growing family of smart energy devices.

### Inverters range:

Single Phase inverter range: 3-10kW



SolarEdge Home Genesis Inverter - Single Phase



# SolarEdge Home Hub Inverters\*

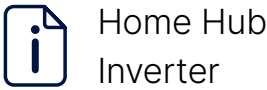
The ultimate home energy managers in charge of PV production, battery storage, backup applications\*\*, EV charging and our growing family of smart energy devices.

### Inverters range:

Single Phase inverter range: 3-10kW.



SolarEdge Home Hub Inverter - Single Phase



\* For expected availability in your region and a list of inverter supported countries, please check with your local SolarEdge representative.

Key Feature	SolarEdge Home Genesis Inverters	SolarEdge Home Hub Inverters
<b>DC-optimisation technology</b> Generating more power from each module, even if a module is shaded	✓	✓
<b>Multi-layer Safety Features</b> <ul style="list-style-type: none"><li>SafeDC™: Automatically reducing to touch-safe voltage when needed</li><li>Module-level arc fault detection</li></ul>	✓	✓
<b>SolarEdge Home Operating System</b> Optimising energy production and consumption in real-time	✓	✓
<b>Robust and simple device communication</b> SolarEdge Home Network eliminates complex cabling, and features automatic device recognition	optional	✓
<b>Battery support</b> Maximising self-consumption	✓	✓
<b>Backup power**</b>		✓
<b>Future add-on possibilities</b> SolarEdge EV Charger	✓	✓
Smart energy management devices	✓	✓

### Homeowner Value:

The SolarEdge Home Inverters give your system high efficiency and allows you to make the best use of the space on your roof. You produce more - and save more. Built-in safety features designed to ensure the safe operation of your system.



# Inverter Commissioning

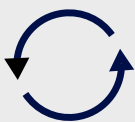
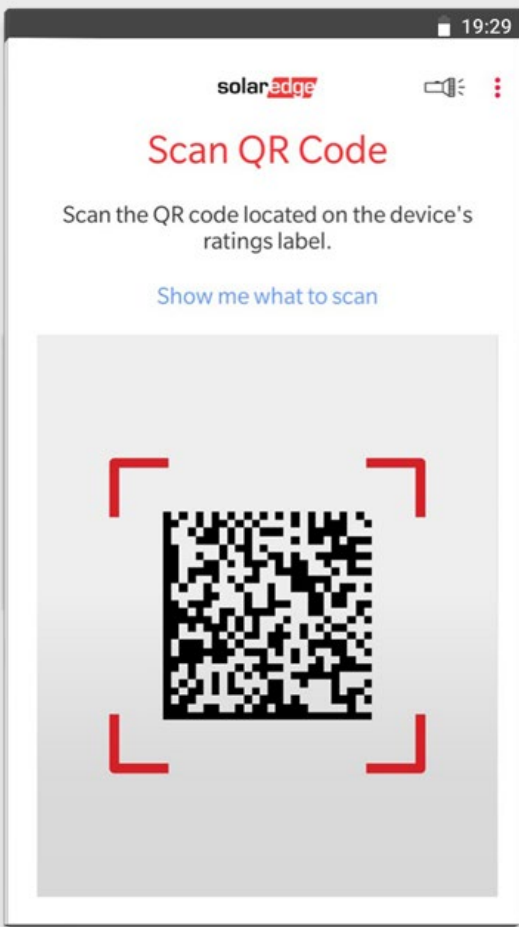
Activating and configuring the inverter is done directly through your smartphone using SetApp, our mobile app for a quick and simple commissioning process.

Download the SetApp mobile app for Android or iOS smartphones, and take inverter commissioning to the next level.



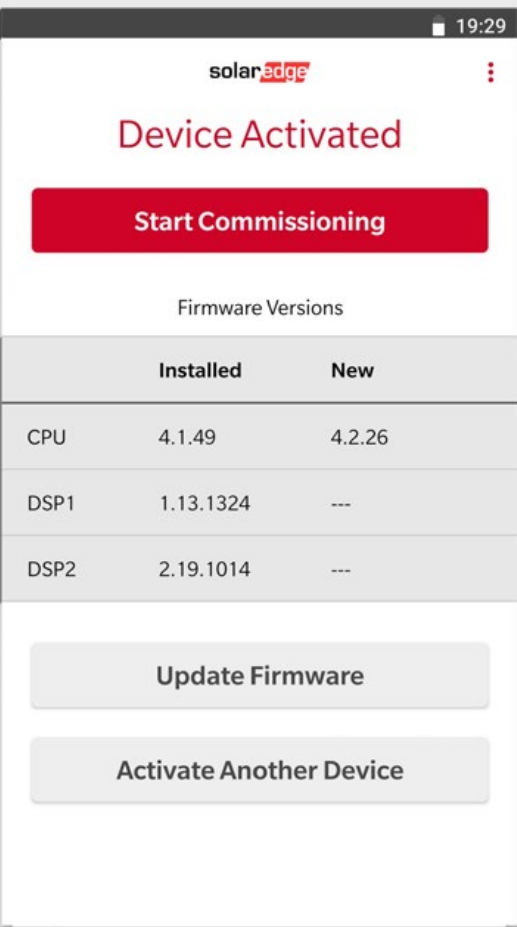
### Connect

- Scan the inverter barcode to create a secure local Wi-Fi connection between your smartphone and the inverter



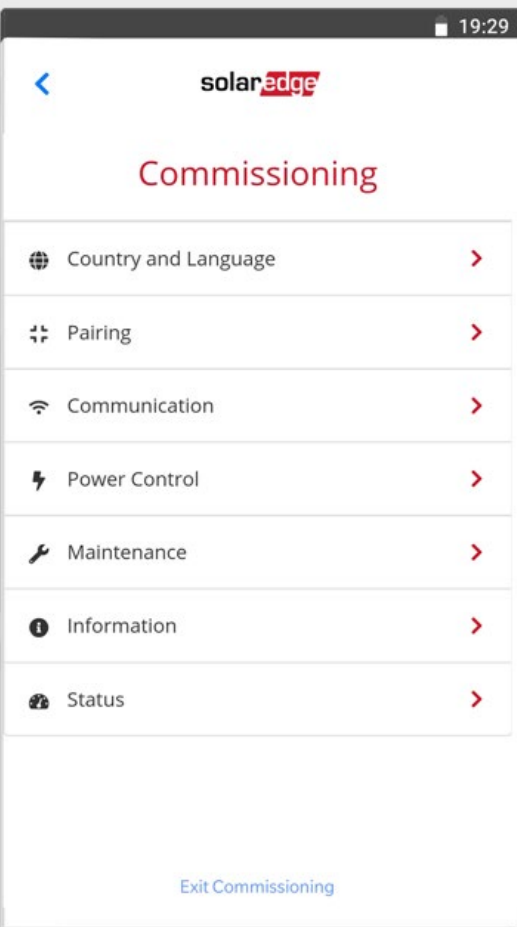
### Updated & Activate

- Update the inverter firmware
- After the inverter is successfully activated, tap 'start commissioning'



### Configure

- Set country and grid, pair Optimisers, and optionally configure additional parameters if needed



# Export Limitation

Integrated in our inverter firmware to dynamically adjust PV power production. This allows you to use more energy for self-consumption when the loads are high, while maintaining the export limit also when the loads are low.

### Key Benefits

- Set any limit imposed by the network restriction
- Enables larger installations and increases self-consumption
- Fast response time — follows rapid power changes (<1 sec)
- Failsafe operation protects the grid

### Meter Support

- The inverter can read a meter installed either at the grid connection point or at the load consumption point
- Two types of meters may be used:
  - SolarEdge Home Inline Meter
  - SolarEdge meter with modbus connection (RS485)
- The inverter maintains the output power limit with accuracy equal to that of the meter
- The Home Hub Inverter comes with an in-built consumption meter to provide energy management





# SolarEdge Home Batteries

Our highly efficient, DC-coupled battery stores any unused solar energy and saves it to power the home at night, on cloudy days, during peak demand periods, or during a power outage\*.

The batteries are designed to work with our inverters for an optimal one-stop-shop solution.



SolarEdge Home Battery



For expected availability in your region, please check with your local SolarEdge representative.



## Key Benefits

### More Energy

Based on DC-coupled technology, any excess PV is stored directly in the battery with no conversion losses.

### Integrated Solution

Integrate with the complete SolarEdge Home ecosystem, providing a single point of contact for warranty, support, training, and simplified logistics & operations.

### Designed for Faster Battery Installations

Simple plug & play installation is made even easier with wireless inverter-battery communication\*\* and quick commissioning flow using SetApp, saving on installation time and reducing messy wiring.

### Multiple Safety Features for Continuous Battery Protection

Continuous protection through measurement and monitoring of battery current and voltage levels.

A built-in array of multi-point temperature sensors to mitigate the risk of battery overheating.

### Scalable Solution

For increased grid independence and savings, homeowners can stack multiple batteries or battery modules per inverter. They can start with one and add more batteries as their energy needs grow.

### Homeowner Value:

Sun-power your home day and night with a home battery that reduces your reliance on the grid by storing your solar energy for use when the sun is down. Add more units to further lower your carbon footprint and to prepare your home for power outages.



# SolarEdge DC-Coupled Technology

DC-coupled PV and storage systems are generally more energy-efficient than AC-coupled systems, which translates into more power generation from the solar system. Here are a few reasons why:

## DC-Coupled Systems are Better for Battery Storage

Since solar modules produce DC, and batteries store DC energy, it makes sense that the battery storage system also operates on DC electricity.

In an AC coupled system, the energy generated from the solar modules is converted to AC, converted again to DC to store in the battery, and when in use in the home, converted back to AC. With every conversion, some energy is lost.

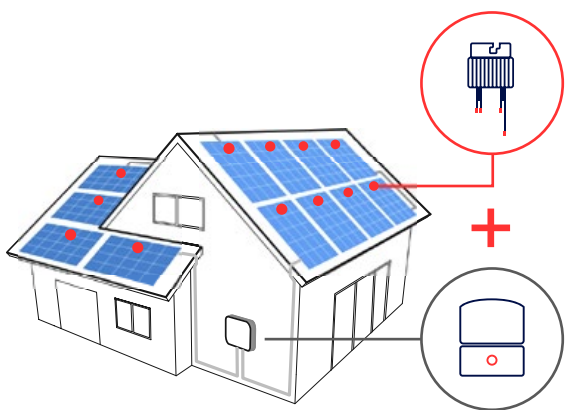
But with the SolarEdge DC-coupled system, there's no need for this extra conversion. The energy is converted only once to AC, making the whole process much more efficient.

## DC-Coupled Inverters are Better for Oversizing

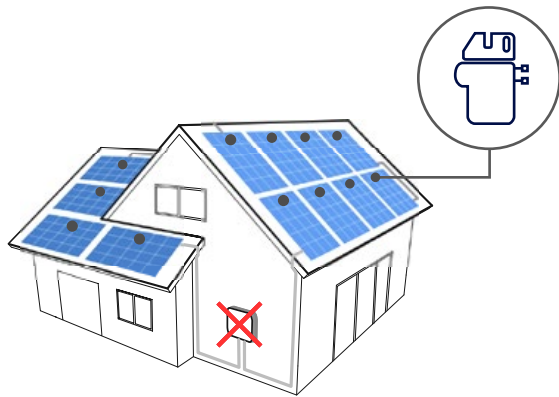
Oversizing is a design concept where the maximum solar energy that can be produced from the PV system is greater than the system's inverter rating.

In an oversized PV system with DC-coupled battery storage, excess solar power can be stored for later use, while the full power of the AC inverter can be used to power the home or exported to the grid.

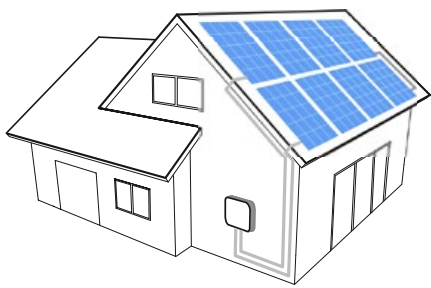
With an AC-coupled system, some of this additional "oversized" energy is simply lost, due to the limitations of the AC conversion. DC-coupled inverters can therefore significantly increase homeowner savings since they allow for more oversizing and more excess energy storage.



- SolarEdge DC-Optimized Technology**
- More energy with maximum power per system
  - Module-level monitoring based on real-time tracking
  - Flexible design
  - maximised safety
  - And much more



- Micro Inverter Technology**
- Lower efficiency (with limited power production at the module level)
  - Lost power and lower system power output
  - Potential safety hazards
  - No DC-coupled storage
  - No DC over-sizing



- String Inverter Technology**
- Energy losses (as power is limited to the lowest producing module on the string)
  - No module-level monitoring
  - Safety limitations
  - Design limitations
  - No DC-couple storage
  - No DC over-sizing




# SolarEdge Home Backup Interface

Enables full or partial home backup\* when the grid is down.

Homeowners enjoy full flexibility in deciding which household loads to backup and in what order. Installers benefit from faster installations due to the integrated SolarEdge metering solution - reducing wiring, labor and installation faults.

\* For expected availability in your region, please check with your local SolarEdge representative. Backup applications are subject to local regulation, require connection with SolarEdge Home Hub Inverters and a firmware upgrade.

 Backup Interface



## Power on Through a Blackout

When combining the Backup Interface with the SolarEdge Home Hub Inverters, and SolarEdge Home Batteries in the event of grid interruption you can provide homeowners with backup power.

## Key Benefits:

- Full flexibility in terms of which loads to backup - the entire home or selected loads
- Wired (RS485) connection
- Scalable solution to support higher power & higher capacity
- Storage and inverter power is scalable

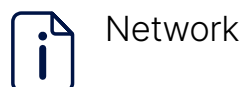


**Homeowner Value:**  
Enjoy full flexibility in deciding which household loads to backup and in what order. During an outage, manage power flow intelligently by choosing which loads to power while avoiding overloading the system.



# SolarEdge Home Network

A Wireless mesh network that connects the devices in the SolarEdge Home smart energy ecosystem.



Network

## Key Benefits:

### Minimizes installation time & risk of errors

- Reduces wiring and connections work
- No cables, conduits, or drilling

### Reliable and robust communications

- Automatic, rapid device detection: Once powered up, devices pop-up in SetApp
- Longer network range: Close devices can be used as repeaters to remote ones
- Self-healing network: When one link is broken, the mesh network will automatically choose another route

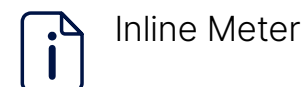
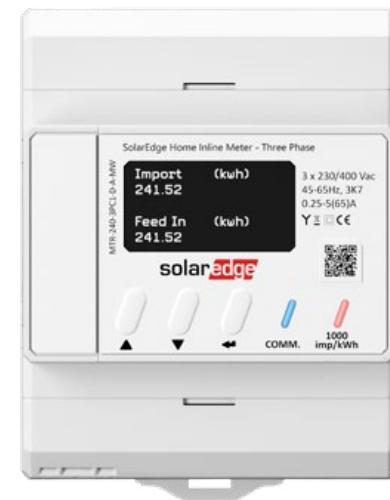
## Homeowner Value:

SolarEdge Home Network is based on fieldproven wireless mesh technology, where each system device can communicate directly with each other. This results in more reliable connectivity for multi-device systems, as there's no single point of failure.



# SolarEdge Home Inline Meter

A highly accurate import/export, production and consumption metering solution. These insights are displayed in the SolarEdge Monitoring Platform and mySolarEdge app.



Inline Meter

## Key Benefits:

- Provides insight into the household production and consumption profile 24/7
- Accuracy of  $\pm 1\%$  or  $\pm 2\%$  according to the grid connection mode
- Integrated current transformers for fast installation and reduced labor costs
- Communicates wirelessly with the inverter through SolarEdge Home Network
- Enables direct connection of up to 65A per phase, for single and three phase grid connections
- Automatic setup detection with the SolarEdge inverter
- Intuitive meter configuration and meter status visibility using SetApp
- Conveniently fits into standard electrical cabinets

## Homeowner Value:

Full transparency of energy consumption. Make better use of the energy produced by diverting excess solar energy to other electrical appliances around the home.



# SolarEdge EV Charger

A smart electric car charger that automatically\* uses available solar energy for EV charging, providing the convenience of fast charging from home with cleaner, cheaper, renewable energy.



## Key Benefits:

- Charges from 100% renewable energy, using excess solar power\*
- Smartly charges when the rates are low including at night\*, or during a power outage\*\*
- Locally integrates with the SolarEdge Home Inverter (one charger per site)\*

## Product Highlights:

- Mode 2 charging unit, with up to 32A (7.4kW) charging power
- Supports single phase installations, for both indoor and outdoor use



EV Charger

## Homeowner Value:

Charge with PV during the day, and have the option of supplementing it with stored solar energy in the battery at night. As a result, you can increase the efficiency of your home's energy consumption and maximise its profitability and savings.





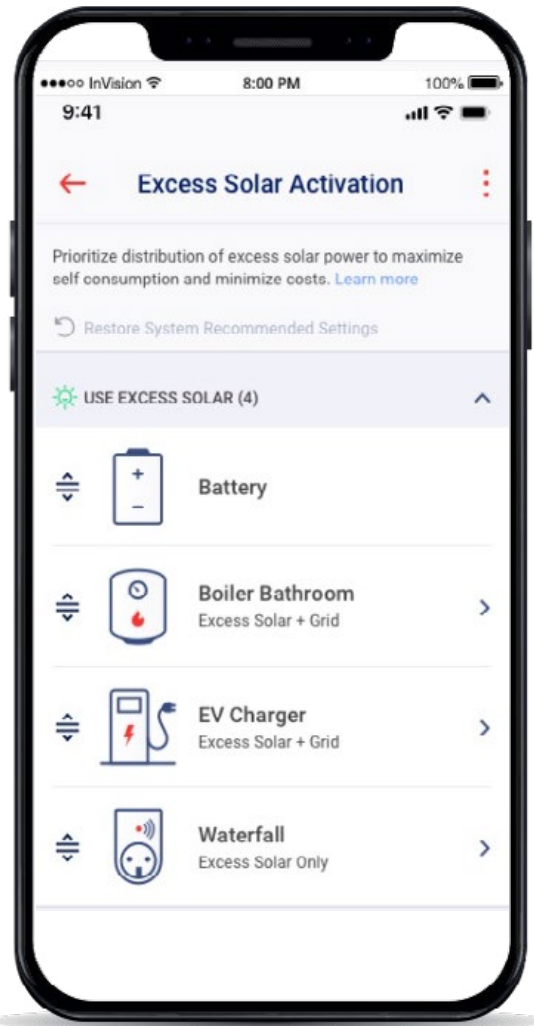
# SolarEdge Home Smart Energy Devices

Optimise the use of solar energy to power compatible home appliances, enabling homeowners to maximise their self-consumption and lower their electricity bills.

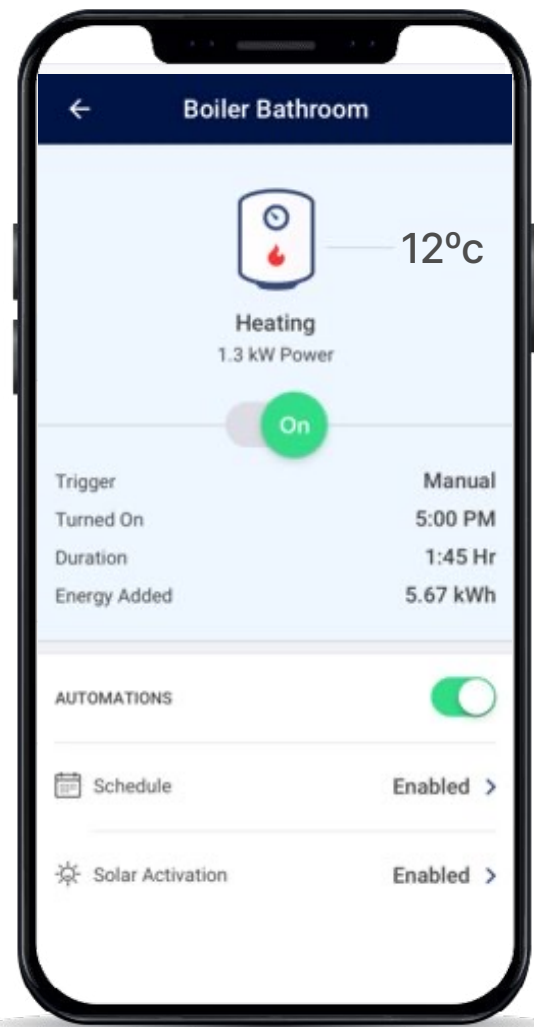
### Real-Time System Visibility and Control

Our smart energy devices provide full visibility and control of compatible home appliances via the Monitoring Platform and mySolarEdge app, with a variety of management profiles including:

- **Manual mode** - Overrides any operating mode or schedule and manually turn on/off a device.
- **Scheduler mode** - Activates multiple programs for automatic appliance operation.
- **Excess PV mode** - Prioritizes an individual appliance to utilize excess PV energy over other devices.
- **Backup essentials mode** - During an outage, keeps-on essential loads and turns off non-essential loads to extend backup time



Smart energy monitoring dashboard



Set devices to run on sunshine

### Smart Energy Applications\*



#### SolarEdge Home Hot Water Controller

Designed to maximise self-consumption by automatically diverting excess PV energy to the home's hot water system.



#### SolarEdge Home Load Controller

A wireless device that Optimises energy consumption by controlling home appliance usage.



#### SolarEdge Home Smart Socket

Can be flexibly plugged into an outlet to control home appliances. Includes a built-in energy meter that measures the appliances' power consumption and type 3 surge protection.

Coming soon



#### SolarEdge Home Smart Switch

Controls small to medium home appliances such as pool pumps, space heaters, lighting, and more. Includes a built-in energy meter that measures the appliances' power consumption and type 3 surge protection.

Coming soon

\* For expected availability in your region, please check with your local SolarEdge representative.

### Homeowner Value:

Use SolarEdge smart energy devices suite to control household appliances remotely and on-the-go, anytime, anywhere, via mySolarEdge app.





# SolarEdge Home Hot Water Controller

A wireless controller that automatically diverts excess PV energy to power the home's hot water system.



## Key Benefits:

- Provides cost-effective thermal energy storage
- Seamlessly integrates with the Monitoring Platform and mySolarEdge app for convenient control of household water heating
- Further reduces homeowners' electricity bills by growing their solar self-consumption
- Enables prioritizing excess solar power to go to the Hot Water Controller before other devices
- Includes a built-in appliance consumption metering and an optional temperature sensor

## Homeowner Value:

Go one step further in reducing your carbon footprint. Install our Hot Water Controller and ensure a clean, renewable electricity source for heating water.



# SolarEdge Home Load Controller

A wireless device that Optimises energy consumption by controlling compatible home appliances.



Controls both small appliances, low voltage control circuits as well as heavy loads such as heat pumps, pool pumps and air conditioners with the use of third-party relays and contactors.

## Key Benefits:

- Controls small appliances directly and heavy loads via external contactors, including SG-Ready capable appliances\*
- Increases savings and reduces grid dependency by maximising solar energy consumption
- Seamlessly integrates into the SolarEdge Home ecosystem with the SolarEdge Home Network
- A switching relay that supports a wide AC and DC voltage range
- Controls devices for increased backup time
- Simplified mounting using the supplied din-rail adapter, or on any existing surface

\* Expected availability during 2023 via firmware upgrade



# SolarEdge Designer

A web-based solar design tool that helps you to plan and build your residential projects from inception to installation.

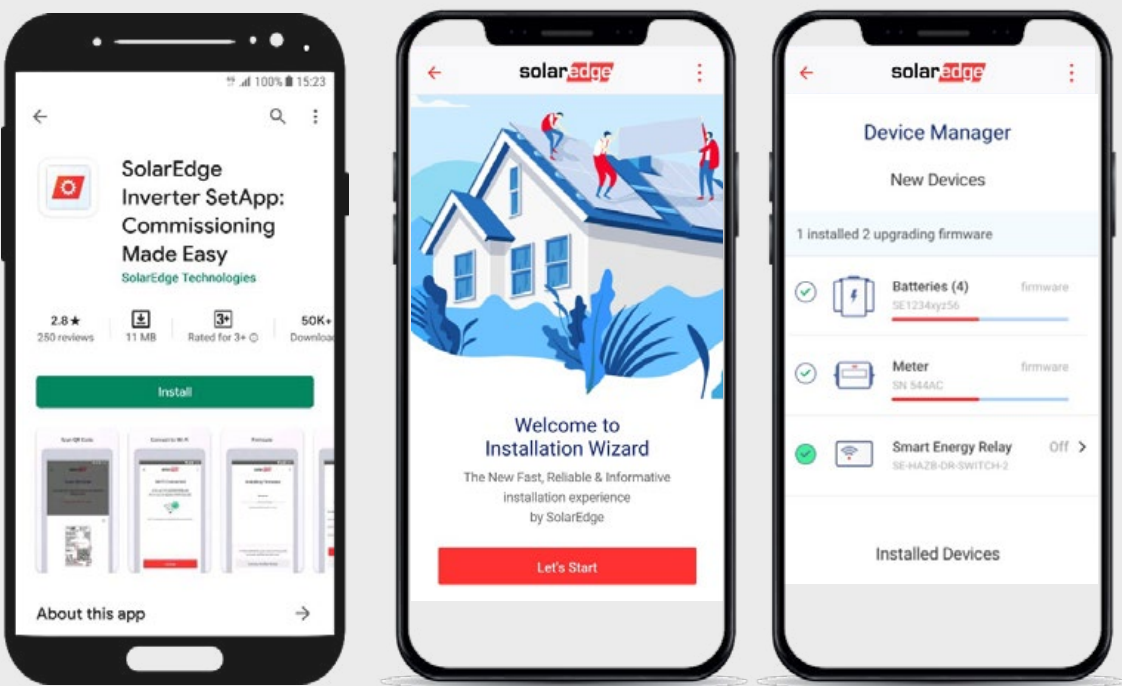
Access the Designer platform via the Login menu on the SolarEdge homepage. Benefit from a streamlined design process with smart features such as automatic 3D modeling support, automatic PV module placement and our smart auto-stringing for quick design. Impress your customers with a visually attractive 3D simulation of their roof, making quick, on-the-fly design modifications based on homeowner feedback.

### Key Benefits:

- Free for use - no license or subscription fees required
- Supports satellite or custom site imagery – no need for a site visit prior to initial design
- maximises roof utilization and eliminates costly installation mistakes by creating visual wiring diagrams of your PV system
- Seamless export of the site layout to the SolarEdge Monitoring Platform with easy project sharing between different stakeholders
- Automatic upgrades — no need to install new versions or download datasets

# SetApp

Your mobile App for streamlined inverter commissioning. Activate and configure your installation with quick and simple step-by-step instructions.



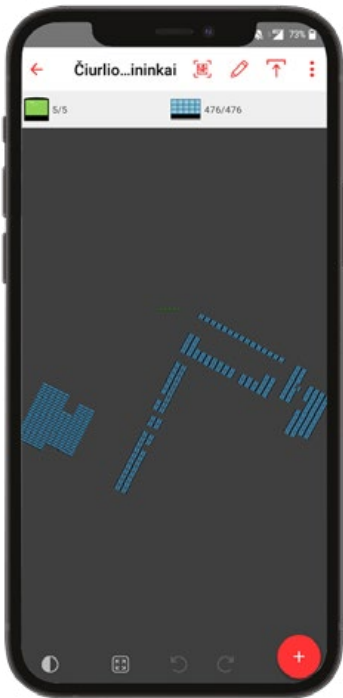
Free download  

### Key Benefits:

- Fast and Easy commissioning from the palm of your hand with a high resolution touch screen
- Benefit from a seamless installation process by using our installation & configuration wizards
- Upgrade to our latest features and see required regulations Easily open a support request or view existing one

# SolarEdge Mapper

A valuable visual tool that creates and edits the physical layout of new PV sites in our Monitoring Platform.



Scan SolarEdge Power Optimisers, smart modules, and inverters' barcodes and create a virtual map of the PV site to help facilitate remote diagnostics. After all system components have been scanned, click "publish" and the layout will appear in the Monitoring Platform.

### Key Benefits:

- Identifying shading patterns and immediately pinpointing system issues
- Parallel site mapping using multiple devices to scan different sections of the site simultaneously
- Option to work offline when there's no data connection



# SolarEdge Monitoring Platform

Efficiently monitors PV sites' production and consumption with real-time data and remotely identifies and manages faults to ensure maximum energy yield.

## Key Benefits:

- Manage your fleet from a single, easy-to-use platform, with smart tools and customization to streamline your fleet
- Data presentation at the module-level, string-level and system level
- Identify sites that require your immediate attention, with our automated alerts system
- Remote troubleshooting and access to real-time system data and guided root-cause fault analysis



## Homeowner Value:

Improve the site performance, maximise solar power harvesting and reduce maintenance costs by increasing system up-time and resolving faults more effectively.

# mySolarEdge

The homeowners app that visualizes PV system production and enables easy management of household energy consumption.

## Key Benefits:

- Monitors system performance in real-time
- Controls smart energy home devices on-the-go
- Configures inverter communications and status for quick and easy troubleshooting
- Provides quick access to SolarEdge support
- Resolves service issues quickly



## Homeowner Value:

Easily track your real-time system production and household energy consumption, and control your energy usage and savings.





# Working with SolarEdge

We offer valuable services to help make your experience positive and efficient.

## Support

Comprehensive pre-and post-sale technical services include documentation, personal project-based consulting, and more. Do not hesitate to contact our support team. Simply open a case via the Support tab of your SolarEdge monitoring dashboard or the SolarEdge website [Support](#) page.

## Training and EDGE Academy

Expand your knowledge of SolarEdge products and solutions. Introducing the all-new EDGE Academy learning platform, offering comprehensive online courses and a customized learning experience. Become a SolarEdge Pro today by accessing a wide range of courses, anytime, anywhere. All developed by SolarEdge training experts.

## Alliance Program

Welcome to the Alliance program where you can accumulate points for every kW of each SolarEdge system that you register on the Monitoring Platform, up to 200kW. Redeem your points for promotional merchandise, or gadgets and gifts.

The points are redeemed by accessing your Alliance portal via the SolarEdge website..

## Marketing Tools

Access marketing collateral to help you sell SolarEdge solutions: visit the SolarEdge website [Downloads Center](#) to access product catalogs, brochures, case studies, datasheets and more.

**Contact your local SolarEdge Sales or Marketing representative for more information about marketing and support services.**



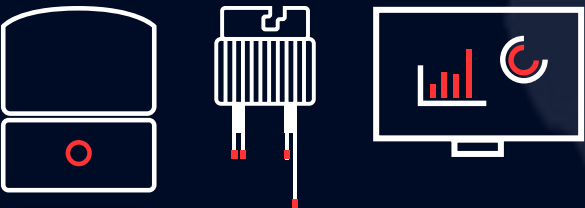
# SolarEdge Fact Sheet

## ABOUT US

In 2006, SolarEdge revolutionized the solar industry by inventing a better way to collect and manage energy in PV systems. Today, we are a global leader in smart energy management technology. By deploying world-class engineering capabilities combined with a relentless focus on innovation, we create smart energy management products and solutions that power our lives and drive future progress.

## Vision

We believe that continuous improvement in the ways we produce and manage the energy we consume will lead to a better future for us all



## Reliability and Innovation

- 25-year power Optimiser warranty, 12-year inverter warranty, extendable to 20 or 25 years
- Award-winning technology



- 445 awarded patents and 426 additional patent applications
- SolarEdge products and components undergo rigorous testing, and have been evaluated in accelerated life chambers
- Reliability strategy includes proprietary application specific ICs (ASIC)

## Bankability

- Approved by major banks and financial institutions worldwide
- SolarEdge (SEDG) is traded on NASDAQ and is a member of the S&P 500 Index
- A global leading PV inverter manufacturer, backed with strong and stable finances combined with cutting-edge technology

## More Power

- Over 4.2 million inverters, over 34.2GW, and more than 101.0 million Power Optimisers delivered worldwide
- SolarEdge's Monitoring Platform continuously tracks over 2.9 million installations across the globe

## Global Outreach

- Systems installed in 133 countries across five continents, with offices and local presence in 36 countries
- Over 51,000 installers
- Sales via leading integrators and distributors
- Follow the sun call centers
- Local teams of sales, service, marketing, and training experts
- Global manufacturing capabilities with tier 1 electronic manufacturing service companies

## Corporate Social Responsibility

As a global leader in smart energy technologies, SolarEdge is committed to a sustainable world and is in full compliance with international standards on quality and control, ethical conduct, and environmental protection







SolarEdge Home is a smart energy ecosystem that enables homeowners to control and Optimise their energy production, consumption and storage with a single app. Using its own Operating System, SolarEdge Home manages the home's solar and grid power 24/7 to minimize electricity costs and maximise savings. In addition to SolarEdge Power Optimisers, inverters and batteries, SolarEdge Home includes a full suite of smart energy devices so homeowners can grow their ecosystem to match their evolving energy needs for true energy independence.

**f** SolarEdge

**@**SolarEdgePV

**▶** SolarEdgePV

**in** SolarEdge

**@**SolarEdgePV

**✉** <http://www.solaredge.com/corporate/contact>

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