Optimized Utility Offering for Developers, Asset Owners & EPCs

About SolarEdge

Global leader in smart energy production, storage and management

4.4M+ monitored systems

- **137M** Power Optimizers shipped
- **58.6GW** Systems shipped worldwide
- **6.8M** Inverters shipped

Serving global, diverse markets

- Systems installed in **145+** countries
- **3.9M+** Homes
- **50%+** of Fortune-100 Companies[1]
- **77,000+** SolarEdge Installers[2]

Our edge

- **3,200+** employees
- Power electronics and engineering
- Software development, data science, cybersecurity
- Automated manufacturing
- Installer experience, service and learning servicess

Data as of Q2 2025

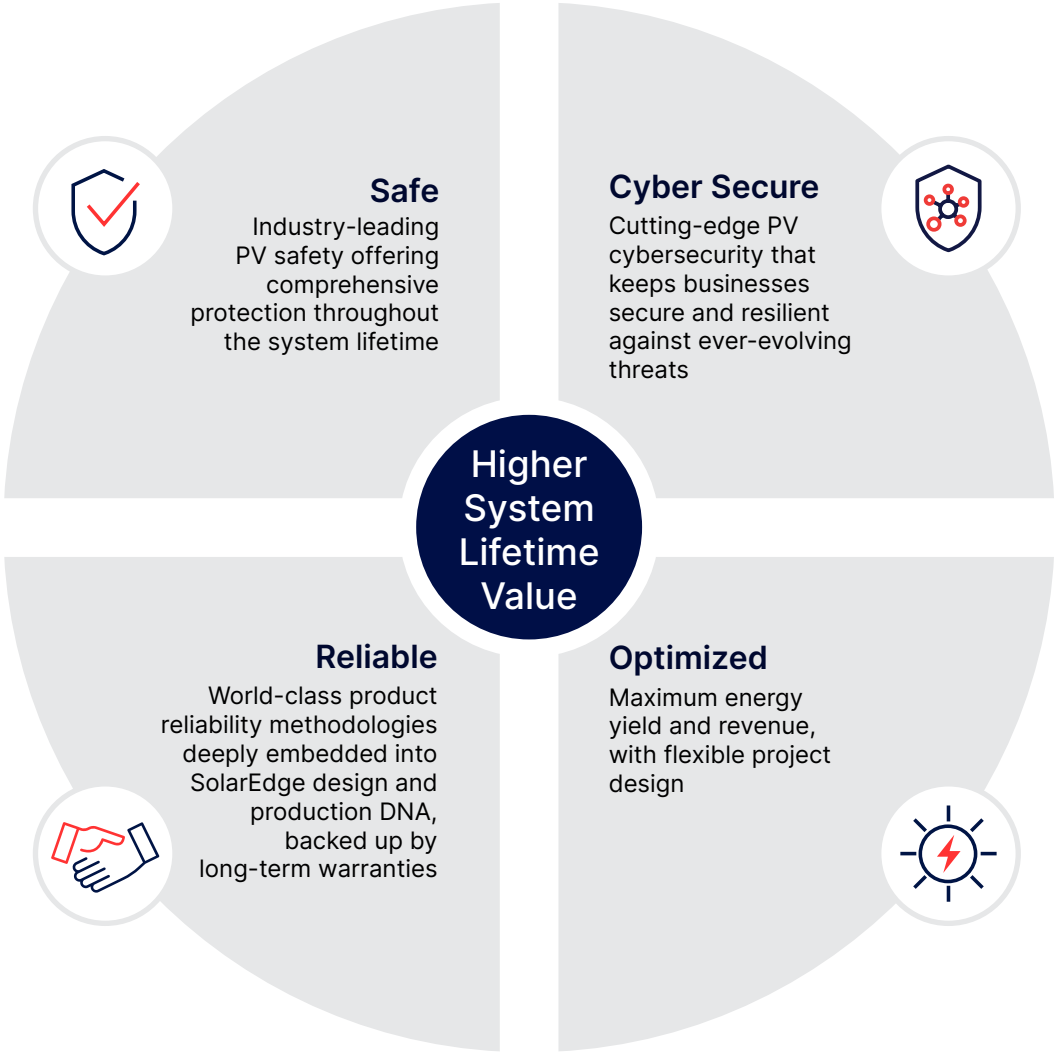
1 Have SolarEdge technology on their rooftops

2 Based on the number of installer accounts on our monitoring portal

SolarEdge's Standout Values

SolarEdge's Optimized Utility solutions are driven by our DC-optimized technology, innovative products and industry-leading PV safety and cybersecurity features.

Together, they help us meet the growing demand and complexities of the utility solar market, and provide our partners with the capabilities to power their PV business.



Safe

A world leader in solar safety

The SolarEdge solution is synonymous with safety. Our comprehensive suite of safety-related technology helps prevent thermal events before they occur, complying with the most stringent international safety standards, going beyond existing industry requirements.

"SolarEdge's integrated safety mechanisms have been independently tested and validated, confirming that they meet industry standards, and go beyond regulatory requirements."

Source: VDE Renewables (a leading provider of quality assurance services) - SolarEdge Report, 2025

SolarEdge's holistic approach to PV safety is built on three main foundations:

Prevention

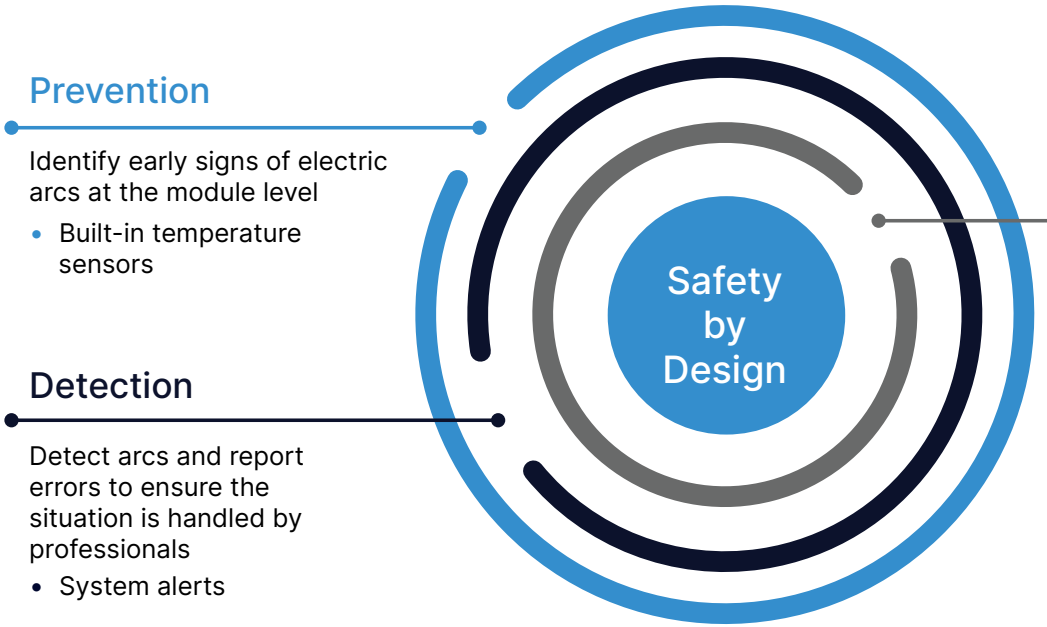
Identify early signs of electric arcs at the module level

- Built-in temperature sensors

Detection

Detect arcs and report errors to ensure the situation is handled by professionals

- System alerts



Mitigation

Trigger automatic actions to minimize the risk when issues occur

- SafeDC™

Cyber Secure

Maximizing solar cybersecurity

Just like solar safety, solar cybersecurity is non-negotiable. By partnering with SolarEdge you get better protection, throughout the entire PV system lifetime. Our tiered approach to cybersecurity is aimed at protecting data integrity, communications, and business operations from site commissioning through to production.

To safeguard system connectivity, functionality, and customer data, SolarEdge follows the Cyber Informed Engineering (CIE) principle, embedding information security mechanisms into our products from the initial design stages. We continuously adapt and enhance our solutions to align with evolving demands and regulatory standards.

> "SolarEdge provides a clear example of how robust cybersecurity mechanisms are essential to mitigating risks associated with cyber threats. Its approach to cybersecurity demonstrates alignment with international best practices."

Source: VDE Renewables (a leading provider of quality assurance services) - SolarEdge Report, 2025

Learn more about SolarEdge cybersecurity features

Webpage

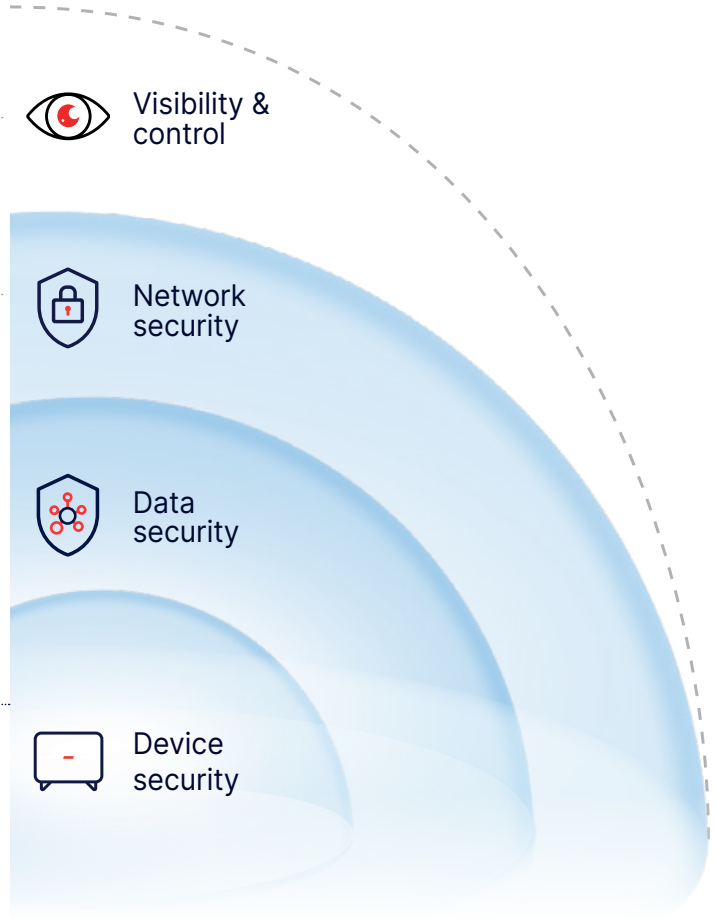
Brochure

We prioritize the needs of our customers' security teams by designing products that are not only secure but also ensure maximum visibility and control for our users.

The energy sub-network is structured to securely integrate with your organizations' IT and OT networks.

Security measures are in place to enable secure transfer and storage of user data and energy usage data (in a data center in Germany), for maximum data privacy and protection from cyber threats.

SolarEdge inverters are the heart of the PV system, and together with other SolarEdge devices, are designed to prevent and detect PV system-wide cyberattacks.



Optimized

Maximum energy yield in utility installations

Common in solar installations, module-level mismatch occurs when PV modules in a string have different Maximum Power Points (MPPs), usually the result of soiling, shading, uneven terrain, or module aging. This decreases the energy yield of the entire string.

With Power Optimizers connected to every two modules, the SolarEdge solution mitigates power losses caused by module mismatch, resulting in maximum production from each module. The underperformance of one will not affect the rest of the system.

Design flexibility

With module-level power optimization and maximum design flexibility, more modules can be installed onsite for increased system capacities which enable shorter project payback periods.

SolarEdge Power Optimizers enable installation of modules in partially shaded areas, strings of uneven lengths, in multiple orientations and in irregularly shaped fields and sloped terrains.

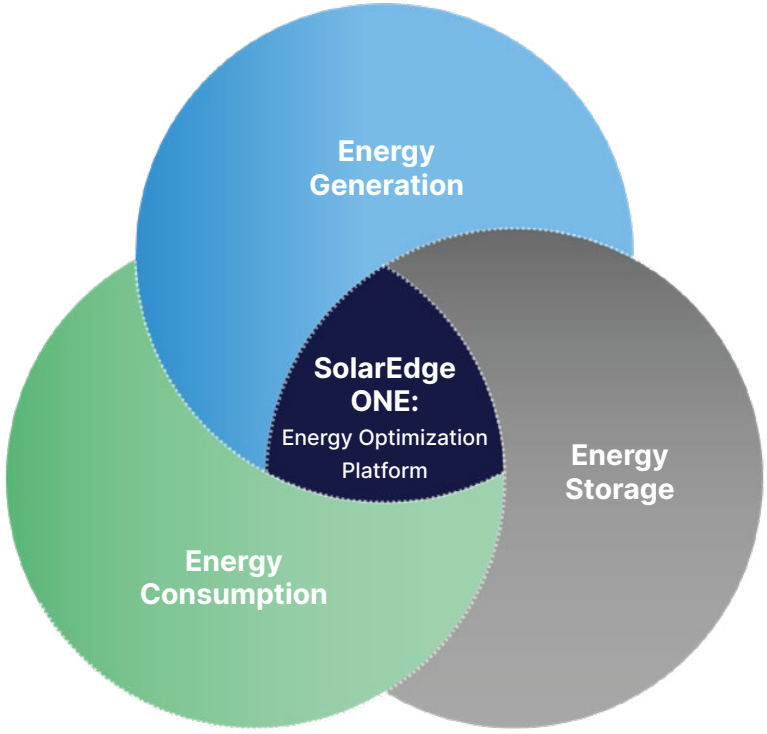
"SolarEdge's Module-Level Power Electronics (MLPE) topology addresses issues caused by PV module power losses. This ensures optimal performance for each module."

Source: VDE Renewables (a leading provider of quality assurance services) - SolarEdge Report, 2025

Energy optimization across the ecosystem

SolarEdge optimizes energy generation, storage and usage by orchestrating decision-making across all site energy assets, from the fleet to the device and module level, via the SolarEdge ONE for Optimized Utility platform.

Able to process vast amounts of data every second, the cloud-based ONE platform incorporates customer definitions and market conditions to ensure each component of the SolarEdge ecosystem is performing at its peak. This helps to save costs, lower operational expenses and meet ESG goals throughout the PV system lifetime.



Reliable

- 25-year Power Optimizer warranty and 5-year inverter warranties
- Global manufacturing capabilities with tier 1 electronic manufacturing service companies
- SolarEdge products and components undergo rigorous testing, and have been evaluated in accelerated life chambers
- Reliability strategy includes proprietary application-specific ICs (ASIC)
- Able to withstand the harshest of environments: resistant to ammonia, humidity, dust and saline, functional in a wide temperature range of -40 ˚C to +60 ˚C

"SolarEdge presented their approach to achieving high reliability for the optimizer and inverter products to DNV. DNV was very impressed by the thorough treatment of this important area as was demonstrated in SolarEdge Reliability Handbook provided to DNV for review."

Source: DNV GL (a leading global risk assessment company) - SolarEdge Optimizer, Inverter and Battery Technology Review, October, 2022

77.52 MW, Tainan City, Taiwan.
Installed by Shinfox

Achieve Higher Lifetime Value

Reduced BoS Costs

SolarEdge Power Optimizers enable more power per string. This means longer and fewer strings of up to 80 modules when compared to traditional string inverter systems.

The reduction in wiring, combiner boxes and fuses can result in up to 50% BoS savings.

Greater O&M Savings

In addition to installation cost savings, lifetime maintenance costs are also lower with SolarEdge.

Our module-level monitoring and remote troubleshooting capabilities transforms O&M from a manual, resource-intensive process to an automated, at-a-glance service, ensuring that every plant is performing to the best of its ability at all times.

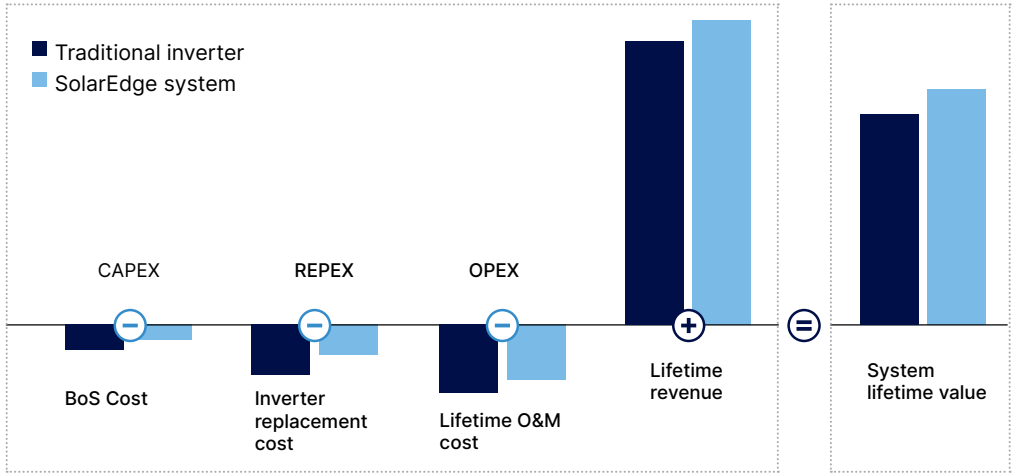
Fewer site visits are therefore needed, further contributing to lower maintenance expenses.

Maximized System Revenue

The SolarEdge solution offers better Levelized Cost of Energy (LCOE) over the system's lifetime by maximizing yield and reducing costs. It maximizes power generation at the individual module level, which leads to a higher lifetime revenue from PV systems.

When combining greater yield performance with additional savings in Balance of System, Operation & Maintenance and system component replacement costs, SolarEdge ensures higher value to the customers during the asset lifetime.

Lifetime PV system cost and revenue*:



* For illustrative purposes only

SolarEdge Optimized Utility Ecosystem

The limited availability of land suitable for utility scale PV is forcing developers to consider non-standard, challenging, and uneven terrains intended for diverse purposes.

To maximize PV production and profitability of these sites, SolarEdge has introduced its Optimized Utility solution, powered by the SolarEdge TerraMax™ Inverter and H1300 Power Optimizer. Specifically designed to maximize the potential of a wide range of dual-use PV applications, they address the challenges posed by shading and uneven terrain for ground mount projects in areas not naturally suited to large-scale solar.

Energy Optimization Solutions

SolarEdge ONE for Optimized Utility

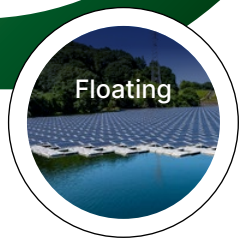
SolarEdge ONE Controller (coming soon)

PV Production

SolarEdge TerraMax Inverters

SolarEdge H1300 Power Optimizers

Application examples:



Empowering Agri-PV with SolarEdge

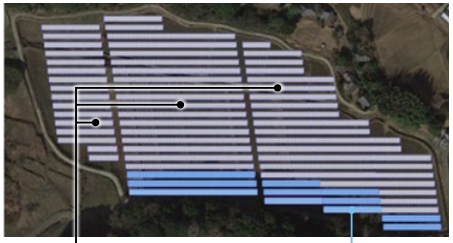
Agri-PV is growing rapidly across the world, allowing farmers a stable revenue stream, reduction in operating costs and protection against climate change hazards, while opening more opportunities for solar development. Like any solar project, Agri-PV installations come with their own unique set of challenges that must be fully addressed by the selected solar technology to ensure its long-term success.

Using DC-optimization - the smart choice for your Agri-PV projects

DC-Optimization technology can mitigate some of the main Agri-PV installation challenges by allowing greater design flexibility, maximizing energy yield, ensuring site safety and increasing O&M efficiencies.

SolarEdge's Power Optimizers enable efficient land-use by allowing installations on partially shaded areas, different module orientations and uneven terrains. By increasing coverage potential, SolarEdge offers more options for optimal layout and design.

SolarEdge's DC-optimized solution also ensures that individual PV modules (including bifacial modules and vertical PV) produce at their maximum energy levels, regardless of shading, soiling/dirt, or module orientation.



Traditional system

More modules with SolarEdge flexible design

Vertical installation powered by SolarEdge

Additional Resources

Video

Brochure

Aligned with Agri-PV best practices and standards

As the global Agri-PV market grows, so have the number of publications detailing Agri-PV best practices and installation guidelines. They list requirements that highlight the importance policy makers are now giving to several key aspects of Agri-PV installations such as maximization of energy output, real-time system visibility and comprehensive site safety.

SolarEdge's Agri-PV solution is clearly aligned with market best practices, ensuring optimized energy and agricultural production while maintaining operational efficiencies. We are also working to ensure our solution consistently adheres to and meets the most up-to-date Agri-PV industry regulations and requirements.

In global Agri-PV best practices guides such as SolarPower Europe's Agrisolar Best Practice Guidelines, DC safety is recognized as the best approach to mitigating Agri-PV risks, such as electric shocks and fires.

"It is recommended to apply Module Level Power Electronics in Agri-PV systems to reduce risk of electric shocks and fires."
SolarPower Europe

"... advanced MLPE solutions can detect the potential for arcs in advance and mitigate the risk with pre-emptive action. MLPE should be applied in Agri-PV systems to reduce the risk of electric shocks and fires.."
SolarPower India

PV Production

SolarEdge TerraMax™ Inverter and H1300 Power Optimizer

Specifically designed for ground mount solar projects

SolarEdge's 330kW ground mount solution is ideal for overcoming complicated challenges often posed by shading and uneven terrain on expansive solar sites.

It reduces Levelized Cost of Energy (LCOE) through higher production and lower BoS costs and also helps streamline installs and maintenance through a unique virtual central topology featuring a single DC input architecture and module-level MPPTs.

- Increase BoS savings: Save up to 50% on BoS costs with longer and fewer strings of up to 80 modules
- Lower O&M costs: Fewer truck rolls with continuous and granular monitoring; reduced project schedule risks with the pre-commissioning feature
- Deliver more energy: up to 200% DC oversizing, 99% efficiency and 100% power at high temperature levels

Additional Resources

Video | TerraMax Webpage | H1300 Webpage | Datasheet | Brochure | Warranty and Support Package

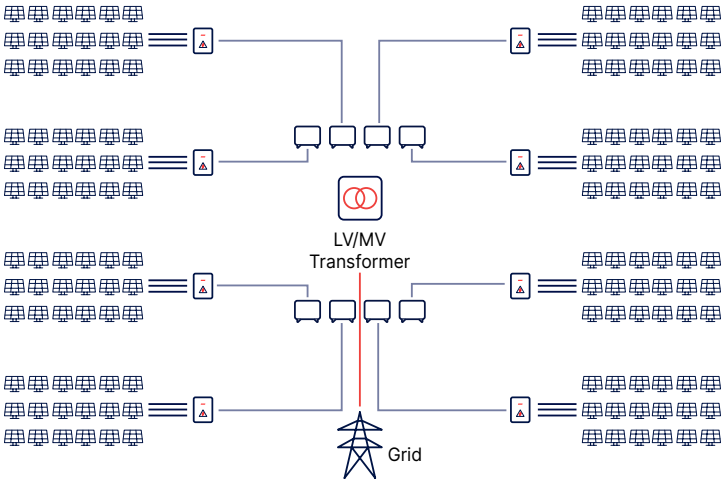
PV Production

SolarEdge TerraMax™: Suitable for Different Topologies

Virtual Central Topology

The inverters are installed in a central location:

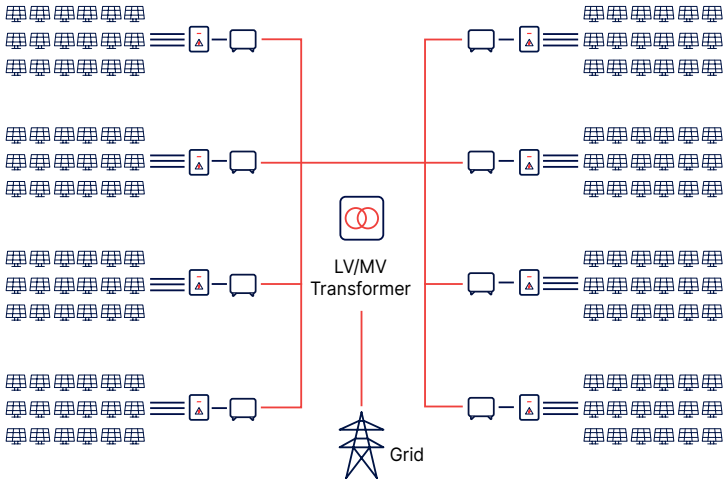
- Higher yield – less voltage drops between inverter and transformer
- Easier access for O&M
- Saves AC cabling costs



Distributed Topology

The inverters are located close to the PV modules

- No need for a dedicated inverter structure



DC Combiner Box | SolarEdge TerraMax Inverter | Multiple DC String from Modules | Single DC Conductor | AC Conductor

SolarEdge TerraMax™ 1MW Installation

This project is located on a site in Northern California, USA owned by the Karuk Tribe, and is expected to produce ~1,575,000 kWh of solar energy annually.

"We chose this solution because it reduces power degradation and simplifies the installation process. The solution offers the benefits of advanced module-level power electronics, including increased energy production, enhanced safety features, and efficient monitoring, aligning with our customer's commitment to innovation, safety, and operational efficiency"

John McDonnell, Principal at SunRenu Solar

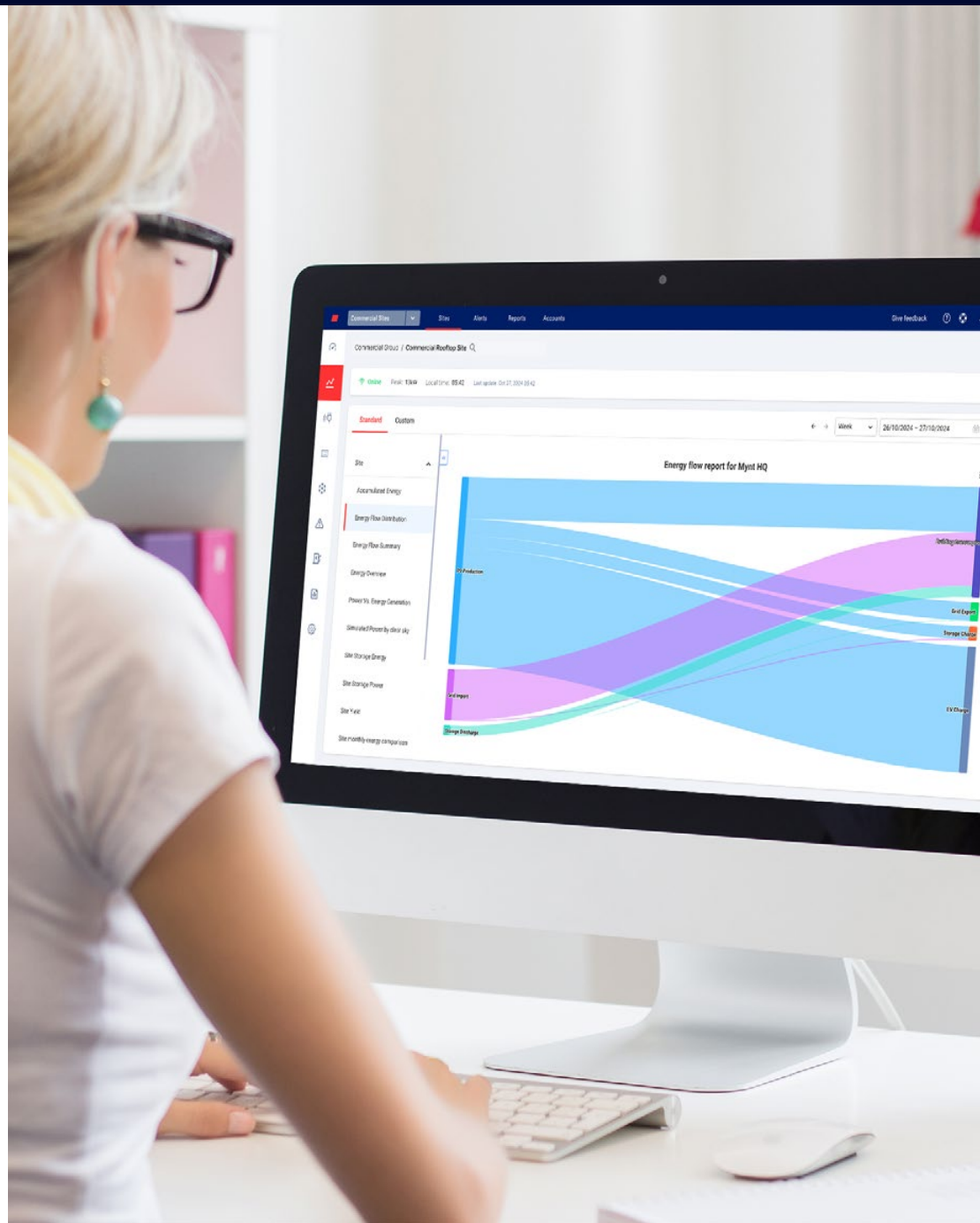
1MW, Yreka, California
Installed by SunRenu Solar

SolarEdge ONE for Optimized Utility

A cloud-based platform designed specifically for O&M professionals.

Offers advanced tools enabling continuous system operation and comprehensive monitoring for improved on-site performance. SolarEdge ONE for Optimized Utility is designed to lower maintenance costs and labor, from the early stage of system installation and throughout the entire project lifetime.

- Enables remote device operation and configuration, allowing site control from a distance
- Ensures each part of the system is performing optimally through a series of key indicators and advanced analytics tools
- Extends the system lifespan through proactive maintenance and quick response to critical issues with a live alerts system and remote troubleshooting
- Supports integration with third-party energy meters and digital sensors via the optional SolarEdge ONE Controller onsite hardware



Additional Resources

Brochure

Energy Optimization Solutions

SolarEdge ONE Controller for Optimized Utility (Coming Soon)

Enables effective site communication and performance

A local communication gateway that seamlessly integrates the site's energy infrastructure including PV inverters, batteries, meters, and more.

- Supports integration with third-party digital environmental sensors and energy meters
- Combines with SolarEdge ONE for Optimized Utility to optimize the use of locally generated energy
- Complies with grid regulations to enable safe, reliable electricity generation (PPC)
- Acts as a cyber gateway for external communications, designed to protect against unauthorized access

Additional Resources

Webpage

Datasheet

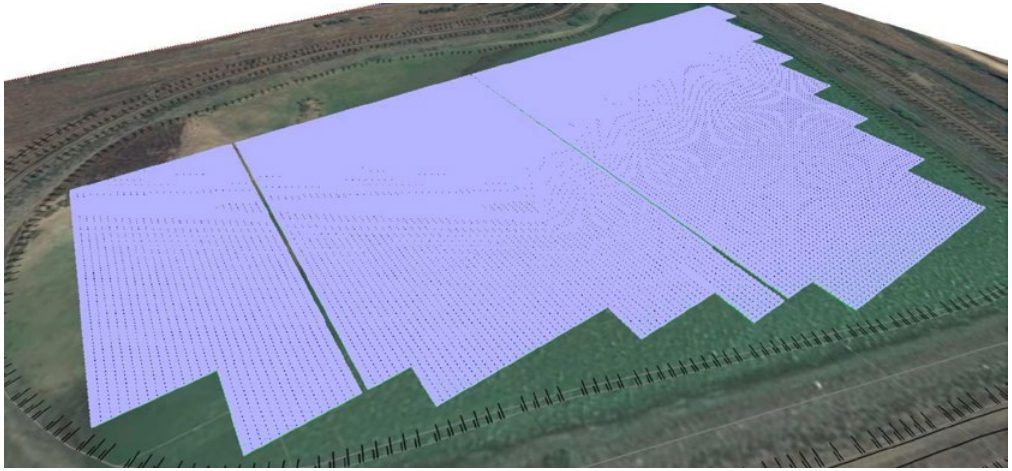
11.5MWp Ground Mount System Comparison

- The ground mount system comprises 18,536 x 620Wp modules
- SolarEdge system design:
  - 30 x 330kW inverters
  - 9,268 x H1300 Power Optimizers (2:1 module to Power Optimizer configuration)
- Traditional string inverter system design:
  - 28 x 350kW inverters

The SolarEdge energy advantage

SolarEdge generates more energy over time due to its ability to mitigate the module mismatch caused by uneven PV module aging. Otherwise, there is the risk that eventually, the module voltage levels will decrease and exit the required voltage range needed for the inverter to perform MPP tracking.

	Traditional String Inverter System	SolarEdge System	SolarEdge Advantage
PVsyst Year 1 Yield (kWh)	19,220,471	19,531,495	1.6%
PVsyst Year 20 Yield (MWh)	16,489,034	17,710,781	7.4%



Higher BoS cost savings with SolarEdge

3MWp block eBoS comparison

	Traditional String Inverter System	SolarEdge System
620Wp Modules	4,838	
Inverters	7 x 350kW	7 x 330kW
No. of Strings	194	94
Modules per String	24	44-46
Solar DC CU Cable 1x6 mm² (m)	-	4,858
DC CU Cable 1 x 10mm² (m)	41,890	-
Solar DC AL Cable 1 x 300 mm² (m)	-	2,354
AC AL Cable 3 x 240 mm² NA2XY (m)	49	
MC4 Y Connectors (1 pair)	336	-
MC4 EVO2	102	98
Datalogger	1	-
DC Combiner 400A with 14 strings	-	3
Total BoS Costs (+ labor, in c/W)	2.1	1
3MWp Block BoS Savings (c/W)*	-	1.1

* Estimated savings on BoS components based on typical market prices in $

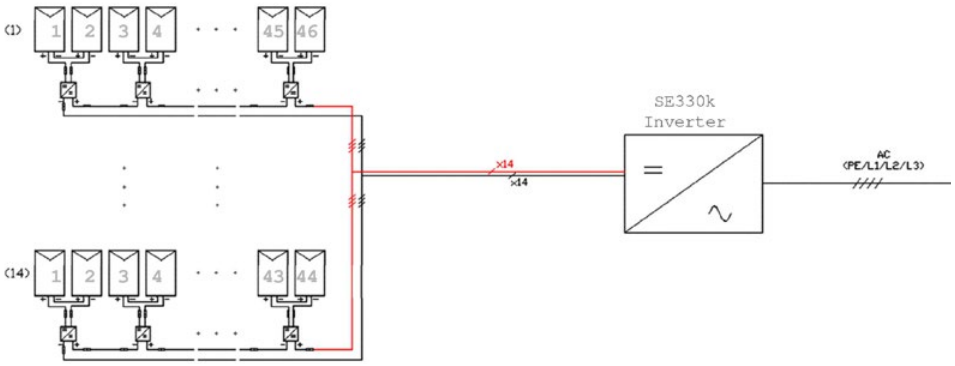
11.5MWp Ground Mount System Comparison

Fewer, longer strings

For this ground mount system, SolarEdge achieves string lengths of 44-46 modules compared to just 24 modules with a traditional string inverter system. The SolarEdge configuration requires only 420 strings compared to 773 strings with the competitor system.

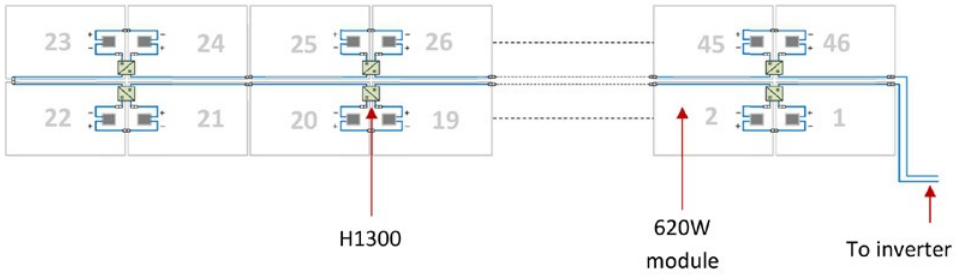
Single Line Diagram with the TerraMax inverter

Typical inverter schematic



SolarEdge String Layout Example

Sample 46-module string



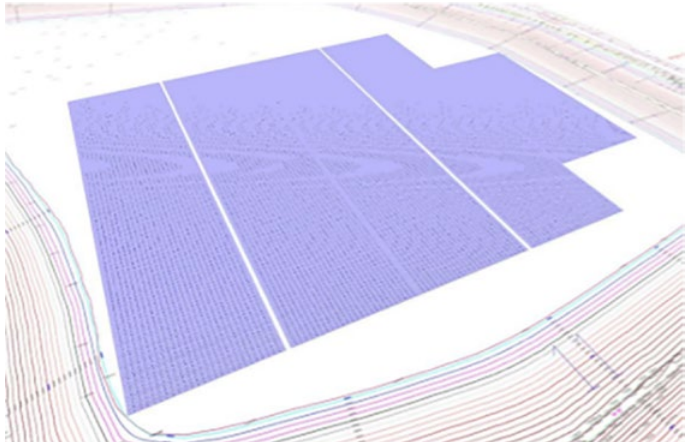
10MWp Floating PV System Comparison

- The floating PV system comprises 16,276 x 615Wp modules
- SolarEdge system design:
  - 27 x SolarEdge TerraMax™ Inverters (330kW)
  - 8,138 x H1300 Power Optimizers (2:1 module to Power Optimizer configuration)
- Traditional string inverter system design:
  - 35 x 250kW inverters

The SolarEdge Energy Advantage

SolarEdge generates more energy over time due to its ability to mitigate the module mismatch caused by uneven PV module aging. Otherwise, there is the risk that eventually, the module voltage levels will decrease and exit the required voltage range needed for the inverter to perform MPP tracking.

	Traditional String Inverter System	SolarEdge System	SolarEdge Advantage
PVsyst Year 1 Yield (MWh)	17,331	17,633	1.8%
PVsyst Year 25 Yield (MWh)	14,845	15,966	7.6%



Higher BoS Cost Savings with SolarEdge

1.8MWp block eBOS comparison

	Traditional String Inverter System	SolarEdge System
DC Power (MWp)	1.8	
AC Power (MVA)	2	1.98
615Wp Modules	1,107	
Inverters	8	6
No. of Strings	134	84
Modules per String	28	44
DC Cable CU 7 AWG (ft)	138,646	94,208
AC Cable AL 3x500MCM AWG ft)	184	138
AC switch 3x250A Panel (pc)	8	-
AC switch 3x320A Panel (pc)	-	6
MC4 Connectors (pair)	224	134
Datalogger	1	-
BoS Costs ($)	57,738	39,427
BoS Costs (c/W)	3.2	2.19
Overall BoS Cost Savings (c/W)*	-	1.01

* Estimated savings on BoS components based on typical market prices in $

Warranty & Support

Protecting your long-term investment, our mission is to ensure the TerraMax solution continues to deliver value for years to come. For that purpose, we offer a dedicated warranty and support package:

Optimized Performance

Power Optimizer warranty
Duration: 25 years

AdvantEdge
Enhanced performance protection: faulty Power Optimizers are monitored, compensate energy loss and replaced hassle free.
Duration: 2 years

SolarEdge TerraMax Inverter warranty
Duration: 5 years

Proactive monitoring:
By SolarEdge professionals to ensure fleet health and maximum production, with minimum down time. Includes monthly reports.Duration: 1 year

Optimized Training

EPC Training Program:
Digital training: Includes designing, installing, wiring, commissioning, and system maintenance

Optional: Onsite training, provided by SolarEdge regional professionals.
Duration: 2 days

O&M Training Program:
Digital training for internal part replacements, including certification.

Optional: Onsite training, provided by SolarEdge regional professionals.
Duration: 1 day

Optimized Support

Dedicated Technical Account Manager:
Designated to ensure single point of contact, and first level of escalation.
Duration: 1 year

Dedicated Support Line:
A personalized service line providing priority assistance, troubleshooting, and support.
Duration: 1 year

Basic Service Level Agreement (SLA):
A foundational Service Level during business days to ensure the system operates efficiently and reliably, according to a pre-defined list.
Duration: 1 year

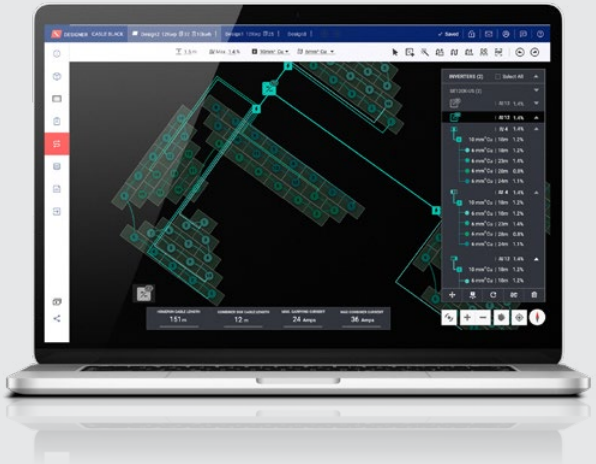
Installer and EPC Tools

With you every step of the way

SolarEdge supports you throughout your PV project life cycle. We provide the tools and services to help you grow your business with us, from project design & pre-sale to project execution and O&M.

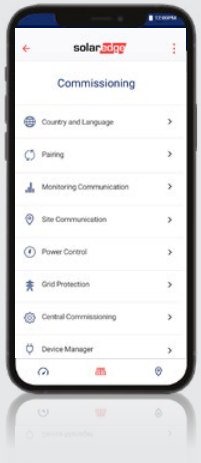
Design and Sell:

SolarEdge Designer



Install:

- SolarEdge Go
- SetApp



Operate and Maintain:

- SolarEdge ONE for Optimized Utility

EDGE Academy

Become a certified SolarEdge installer!

Login now

Empowering Solar Professionals

SolarEdge has you covered with the EDGE Academy, our award-winning learning services platform designed to transform you into a SolarEdge Pro.

Master the skills of SolarEdge commercial system installation and reduce time onsite with certified training courses that provide the practical knowledge needed to expertly design, install, and maintain SolarEdge systems.

Brandon Hall Group HCM Excellence Award LEARNING AND DEVELOPMENT GOLD 2023

SolarEdge Designer

SolarEdge Designer is the ultimate software tool for generating exceptional PV designs for maximized energy production. It streamlines PV system design and simulation, seamlessly translating specs into real-life installations.

From site modelling to PV layout, to electrical design, to production simulation to financial analysis, you can do it all with Designer. It's your all-in-one tool for generating a SolarEdge PV system design and creating reports and proposals for potential customers.

Designer **login** | Designer **signup**

SolarEdge Go*

The new on-the-go app for SolarEdge professionals that consolidates solar installation, site & fleet monitoring and management, and remote services for streamlined end-to-end operations.

- Reduce costly site visits while maximizing operational efficiency with direct system access
- Enable remote diagnostics and configuration, and manage your support tickets all from your mobile device
- Import designs, view site data, register new or replaced devices, etc. all on-site without needing to return to the office

Webpage

* Current release supports monitoring features only, with additional functionality coming soon

SetApp

Your go-to mobile app for streamlined inverter commissioning. Activate and configure your installation with quick and simple step-by-step instructions from the palm of your hand.

Webpage

SolarEdge ONE for Optimized Utility

Catering to PV professionals requiring PV monitoring and O&M capabilities, SolarEdge ONE core functionalities are accessible by all system users.

It includes site visibility and maintenance tools via a game-changing interface that places an unprecedented amount of data at your fingertips. Deeper performance analysis than ever before will be possible, across your entire SolarEdge fleet, and as always, down to the module level.

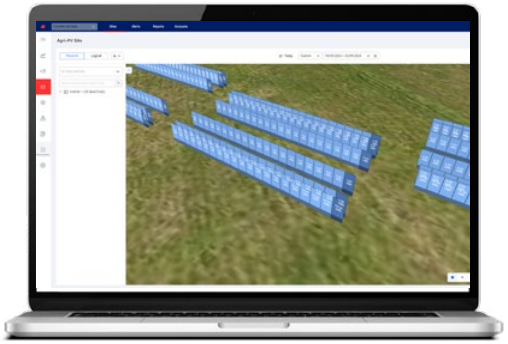
Advanced features for PV site operation and maintenance include:

- Digital Twin tool that merges a site's virtual 3D representation with real-time data enabling quick site inspections and detailed performance analysis
- Remote device configuration and troubleshooting from the comfort of your office for reduced time onsite
- Extensive pre-configured and customizable charts so you can deep dive into site/device/module-level data
- Multiple report options to analyze and compare system performance per Site or Account level
- Automated alerts pinpointing system issues, ensuring proactive maintenance and fast resolution

ONE for Optimized Utility
login

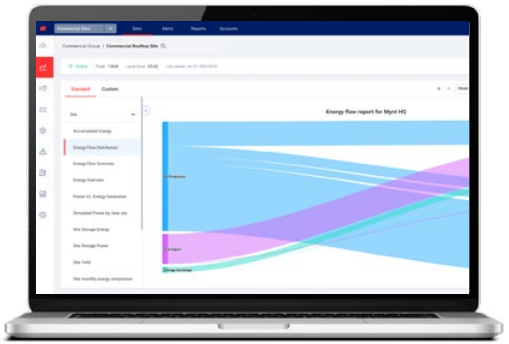
Additional Resources

Brochure



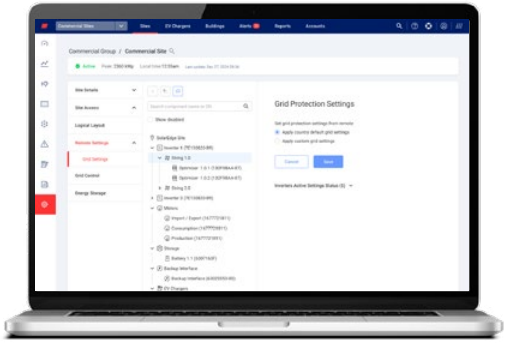
Digital Twin 3D site layout

Video



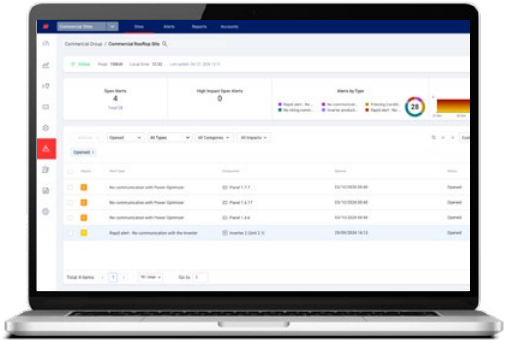
System analysis tools

Video



Remote device configuration

Video



System alerts

solaredge