

About SolarEdge

Our Fields of Vision







Small-Medium Enterprises



Ground Mount/Community Solar



Agriculture

Carports



Educational Institutions



Healthcare



Government



Floating Systems



Retail/Warehouses

Making a World of Difference

SolarEdge Monitoring Platform continuously tracks more than 3.7 million installations across the globe

52.6GW of clean energy delivered

5,600+
employees worldwide

Systems installed in over 140 countries

>50% of Fortune 100 companies have SolarEdge systems on their rooftops 602

awarded patents

528 additional patent applications

Diversified global manufacturing capabilities

Global Reach with North American Specialization

SolarEdge (NASDAQ: SEDG) is a global leader in smart energy, having revolutionized sustainable energy with a ground-breaking intelligent inverter solution that decreases energy costs while maximizing energy production.

360° Support

From project design through to commissioning and advanced asset management capabilities, SolarEdge has the tools to ensure optimal site performance over the system lifetime, with field support and service fleets available across North America.

Corporate Social Responsibility

SolarEdge is committed to a sustainable world and is in full compliance with international standards on quality and control, ethical conduct, and environmental protection.

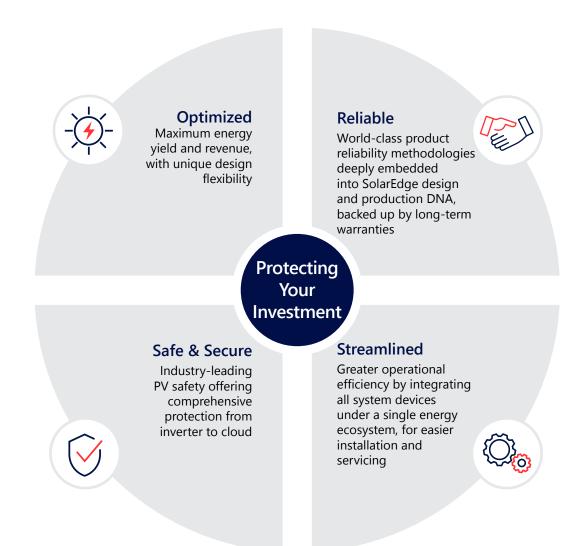
Read our 2022 Sustainability Report.



SolarEdge's Standout Values

SolarEdge commercial solutions are driven by our DC-optimized technology, diverse product offering and industry-leading PV safety features.

Together, they help us meet the growing demand and complexities of the rapidly evolving commercial solar market, and provide SolarEdge asset owners with the peace of mind that their long-term investments are protected.





About SolarEdge

SolarEdge's Standout Values Our Rooftop
Offering

System Comparison -Rooftops Our Ground Mount Offering System Comparison - Ground Mount

Protecting Your Investment

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.

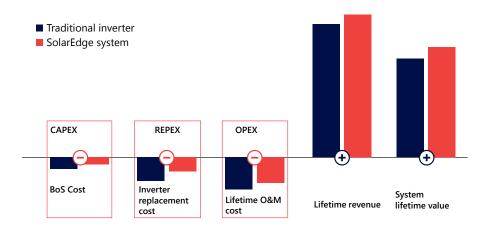
When combining greater yield performance with additional savings in Balance of System, Operation & Maintenance and inverter replacement costs, SolarEdge ensures higher value for system owners and investors during the asset lifetime.

Reduced BoS Costs

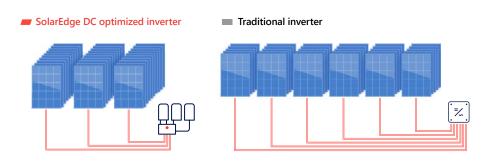
SolarEdge Power Optimizers enable more power per string. This means longer and fewer strings when compared to traditional string inverter systems.

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

Lifetime PV system cost and revenue:



SolarEdge solutions require less wiring:



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.



Maximum Energy Yield in Commercial Installations

Common in commercial 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 each module, 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.

Unique Design Flexibility

With module-level power optimization and maximum design flexibility, more modules can be installed on the roof 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 different roof facets.



Safe & Secure

A world leader in solar safety

The SolarEdge solution is synonymous with safety, with over 50% of Fortune 100 companies having installed our systems on their rooftops. Our comprehensive suite of safety-related technology helps prevent thermal events before they occur. We meet and exceed NEC code requirements, including NEC 2014, 2017, 2020 and UL3741 PV Hazard Control.

SolarEdge's multi-layer PV safety approach is built on three main foundations*:



Prevention: Identify early signs for electric arcs, at the module level

- SolarEdge Sense Connect
- Built-in temperature sensors



Detection: Report errors in real-time to shorten response time

- AFCI Arc detection algorithm
- / Monitoring system with pinpointed alerts



Mitigation: Trigger automatic actions to minimize the risk when issues occur

- ✓ SafeDC™
- Rapid Shutdown

Comprehensive protection from inverter to cloud:

SolarEdge is committed to promoting cybersecurity across our entire line of smart inverters, worldwide data & communication infrastructure, and data centers. We diligently follow cybersecurity best practices across all our digital assets and aim to comply with all relevant industry regulations, such as ISO27001 and GDPR.



Learn more about SolarEdge safety features





* Our safety features may vary between different products and firmware versions





Reliable

- 25-year Power Optimizer warranty and up to 12-year inverter warranties, extendable to 20 years (for selected inverters)
- 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° F to +140° F
- / All inverter models are UL1741 SA certified, for CPUC Rule 21 grid compliance

"DNV GL views SolarEdge's approach to product reliability to be thorough and following good engineering practices. These include design for reliability, reliability testing, and analysis of field failure data."

Source: DNV GL (a leading global risk assessment company) - PV Optimizers and PV Inverter Technology Review, Nov. 2019



Streamlined

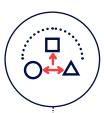
SolarEdge enhances operational efficiency by integrating all devices across our energy ecosystem, including external sensors, and employing an open API approach for third-party applications.

This empowers you to manage the entire energy ecosystem through a single platform and optimize workflows for faster system deployment and reduced resources.

Streamlined Processes



Seamless Integration
With SolarEdge product
suite



Open API
For third-party applications



Controlled by a Single Platform

Manage the entire energy ecosystem from a single device





SolarEdge Offering for Commercial Rooftops

Our diverse portfolio is designed to cater to a wide array of C&I rooftop applications. It encompasses a range of product offerings tailored to meet various needs and goals while optimizing performance across the ecosystem, from the PV module up to the site level.



Energy Optimization Solutions









SolarEdge ONE Controller

EV Management Building Loads **Hark**

Examples of commercial rooftop applications:













Three Phase Inverters with Synergy Technology

Ideal for commercial and industrial rooftops, community solar, carports, and more

- √ 50kW-120kW models, with up to 175% DC oversizing
- / Combines large capacity with ease of installation
- / Reduces time onsite with pre-commissioning before grid connection



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S-Series Power Optimizers

Maximizes PV module production and lowers DC BoS costs while providing module-level preemptive safety and visibility

- / S-Series models include: S1200, S1201
- / Advanced safety features for maximum protection of people and property
- Includes SolarEdge Sense Connect technology which avoids thermal issues via early detection of improper connector issues or malfunctions
- / Compatible with all module types including high power and bi-facial
- / Module-level optimization with 2:1 PV module to Power Optimizer ratio



Three Phase Inverters

Maximizes energy production and safety for small-medium size commercial PV projects

- √ 10kW-40kW models, with up to 175% DC oversizing
- Fixed voltage inverters for superior efficiency and longer strings
- Integrated arc fault protection and rapid shutdown



Energy Meters

Supports high accuracy production/consumption monitoring, and export limitation

- Simple installations and connectivity
- Type NEMA 3R enclosure for outdoor protection
- Provides high accuracy meter readings
- / Communicates over RS485 to provide system monitoring data





Energy Optimization Solutions - Coming Soon

SolarEdge ONE for C&I

Optimize PV, EV charging and building loads

An end-to-end energy management system, which helps businesses reduce operational costs and maximize profits. Designed to utilize real-time internal and external data to make intelligent decisions and optimize energy, through its various modules:

- PV gain PV production forecasts generated based on past patterns of each site correlated with forecasted weather and expected irradiance conditions
- EV designed to optimize EV charging based on grid constraints and solar energy availability, which contributes to grid stability and to reducing peak demand. (Powered by Wevo)
- Building Loads designed to connect, analyze, and optimize industrial assets, buildings, and energy in real-time. (Powered by Hark)

SolarEdge ONE Controller

Enable effective communication and performance

The SolarEdge ONE Controller integrates and ensures the communication of the site's energy assets, including energy meters, inverters, EV chargers and building loads

- ✓ Together with SolarEdge ONE for C&I, it optimizes use of locally generated energy, to minimize energy charges
- I Encased in a weatherproof, heat-resistant outdoor enclosure
- / Interfaces with third-party sensors and control units
- / Integrated with digital weather sensors and an energy meter
- / Complies with grid regulations to enable safe, reliable electricity generation (PPC)







1.27MWp Rooftop System Comparison

- ✓ The rooftop system comprises 2,650 x 480Wp modules
- / SolarEdge system design:

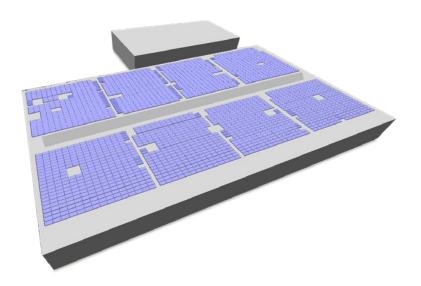
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- /8 x SE120K Synergy Technology inverters
- / 1,325 x S1201 Power Optimizers (2:1 module to Power Optimizer configuration)
- / Traditional string inverter system design:
 - /20 x 50kW inverters

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)	1,469	1,499	2%
PVsyst Year 20 Yield (MWh)	1,314	1,388	6%



Higher Balance of System (BoS) Cost Savings with SolarEdge

	Traditional String Inverter System	SolarEdge System
DC Power (MWp)	1.27	1.27
AC Power (MVA)	1	1
480Wp Modules	2,650	2,650
Inverters	20	8
No. of Strings	180	75
PV Modules per String	15	36
BoS Cost (c/W)	1.58	1.14
Overall BoS Cost Savings (c/W)*	-	0.44

^{*} Estimated savings on BoS components based on typical market prices in \$

4.4MWp Carport System Comparison

- The carport system comprises 7,996 x 550Wp modules
- / SolarEdge system design:

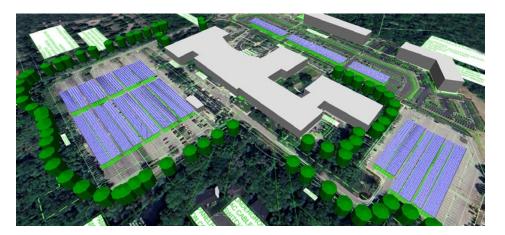
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- /28 x SE120K Synergy Technology inverters
- /3,998 x S1201 Power Optimizers (2:1 module to Power Optimizer configuration)
- / Traditional string inverter system design:
- /3 x 50kW inverters
- /51 x 62.5kW inverters

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)	5,141	5,317	3.4%
PVsyst Year 20 Yield (MWh)	4,631	4,925	6.4%



Higher Balance of System (BoS) Cost Savings with SolarEdge

	Traditional String Inverter System	SolarEdge System
DC Power (MWp)	4.4	4.4
AC Power (MVA)	3.34	3.34
550Wp Modules	7,996	7,996
Inverters	54	28
No. of Strings	445	252
PV Modules per String	17-18	30-32
BoS Cost (c/W)	18.49	15.4
Overall BoS Cost Savings (c/W)*	-	3.09

^{*} Estimated savings on BoS components based on typical market prices in \$

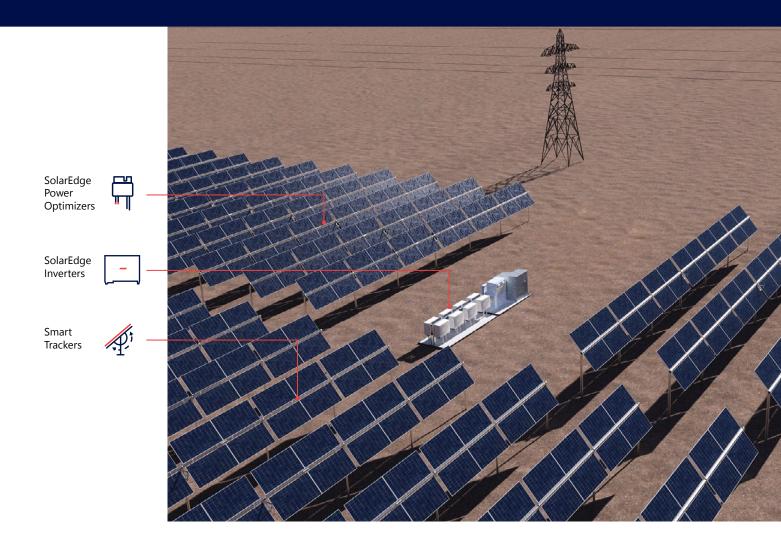


Our Ground Mount Offering



SolarEdge Ecosystem for Large Scale Ground Mount

Our next-generation solution for large-scale ground mount projects is designed to overcome non-standard terrain – which may be rocky or uneven – and meet unique site requirements with resilient and versatile technology.



Examples of large-scale, ground mount applications:







PV Production

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SolarEdge TerraMax[™] 330kW Inverter and H1300 Power Optimizer

Specifically designed for community solar

SolarEdge's 1500Vdc ground mount solution is ideal for overcoming complicated challenges often posed by shading and uneven terrain on expansive community 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: Flexible design 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



SolarGik Smart PV Trackers

Unlock the full potential of non-traditional terrains with PV trackers and its smart tracking control system that enables greater control over the angle of each module - unlike long solar tables.

- Lower system and installation costs with 30% lighter trackers (20-25kg per kWp)
- / Short, independently controlled, tracker tables that increases accuracy across uneven terrain
- ✓ Increase energy generation, reliability and O&M cost savings

Allows best synergy between agricultural and energy production, maximizing optimization based on various parameters:

- / Understand solar and agricultural seasonal patterns and shifts
- Balance sunlight distribution between crops and PV modules, based on crop data, weather









10.1MWp Ground Mount System Comparison

- ✓ The ground mount system comprises 17,280 x 585Wp modules
- / SolarEdge system design:

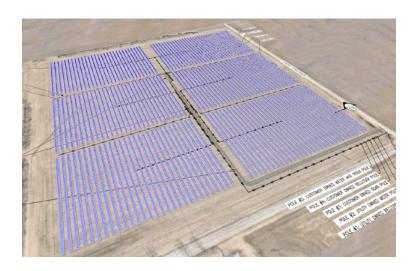
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- / 24 x TerraMax[™] 330kW Inverters
- /8,640 x H1300 Power Optimizers (2:1 module to Power Optimizer configuration)
- / Traditional string inverter system design:
 - /60 x 125kW inverters

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)	15,920	16,232	2%
PVsyst Year 20 Yield (MWh)	14,555	15,311	5%



Higher Balance of System (BoS) Cost Savings with SolarEdge

	Traditional String Inverter System	SolarEdge System
DC Power (MWp)	10.1	10.1
AC Power (MVA)	7.5	7.92
585Wp Modules	17,280	17,280
Inverters	60	24
No. of Strings	720	360
PV Modules per String	24	48
BoS Costs (c/W)	6.84	4.15
Overall BoS Cost Savings (c/W)*	-	2.69

^{*} Estimated savings on BoS components based on typical market prices in \$







Supporting our installers every step of the way

At each stage of the SolarEdge project life cycle, we provide our installers with all the tools and services they need to ensure optimal project designs, safe and efficient installations, and maximum O&M savings.

Design and Sell:

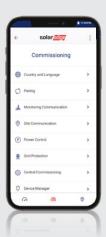
SolarEdge Designer

The ultimate software tool for generating exceptional SolarEdge PV designs for maximized energy production.

Install:

SetApp

The go-to mobile app installers use for fast inverter commissioning.



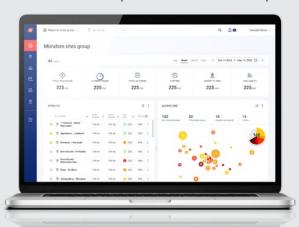
Operate and Maintain:

Monitoring Platform

Real-time, module-level site visibility with pinpointed alerts for higher system uptime.

SolarEdge ONE for C&I (coming soon)

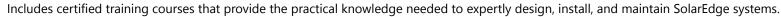
End-to-end energy management solution which helps businesses reduce operational costs and maximize profits.



EDGE Academy

Empowering Solar Professionals

SolarEdge has our installers covered with the EDGE Academy, an award-winning learning services platform where they can master the skills of SolarEdge commercial system installation and reduce time on site.







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Mount Offering

System Comparison - Ground Mount Installer and EPC Tools



solaredge.com | infoNA@solaredge.com

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