



# CC&I Offering for Investors and System Owners

for North America



# About SolarEdge

## Our Fields of Vision



Carports



Small-Medium Enterprises



Ground Mount/Community Solar



Agriculture



Educational Institutions



Healthcare



Government



Floating Systems



Retail/Warehouses

## Making a World of Difference

SolarEdge Monitoring Platform continuously tracks more than **4 million** installations across the globe

**4600+** employees worldwide

**647** awarded patents

Systems installed in over **140 countries**

**527** additional patent applications

**54.5GW** of clean energy delivered

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

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

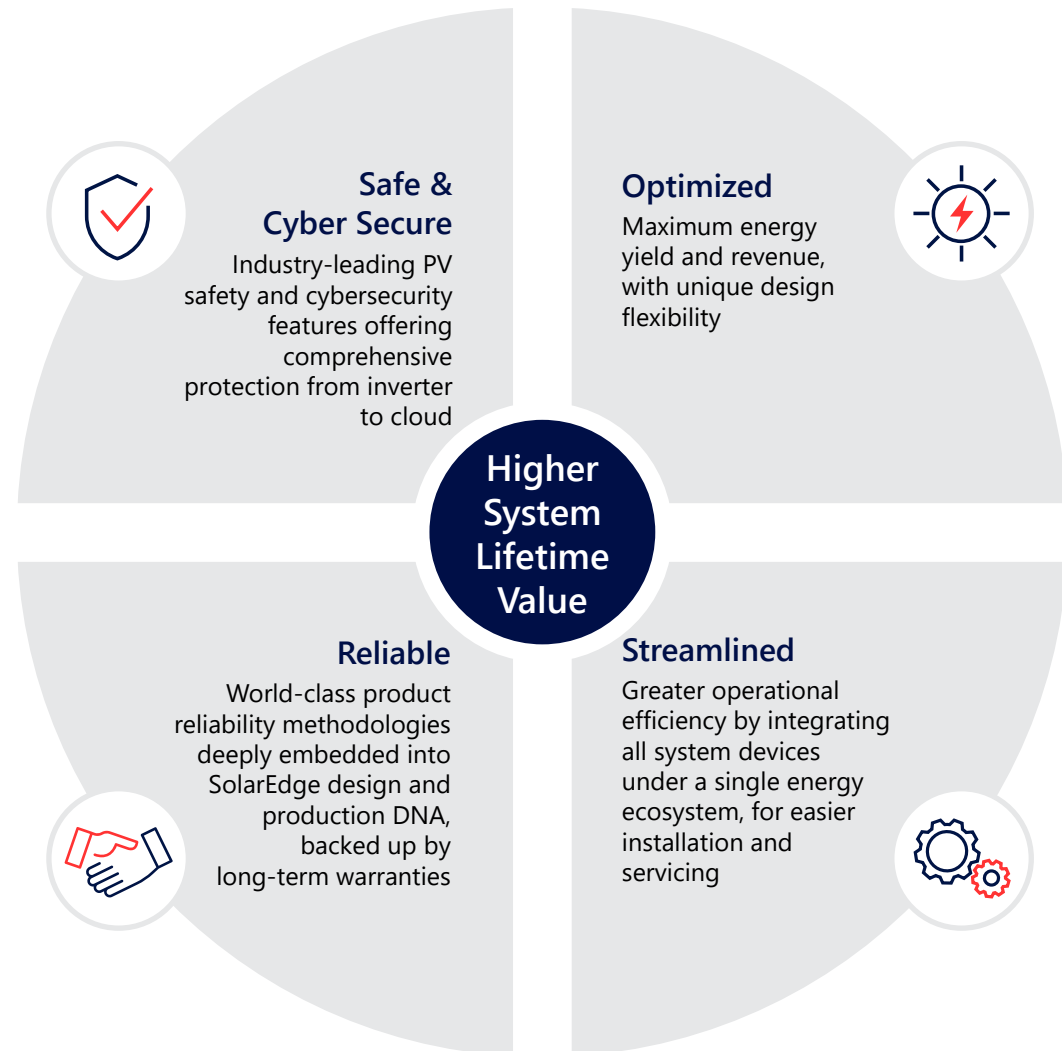
SolarEdge is committed to a sustainable world and is in full compliance with international standards on quality and control, ethical conduct, and environmental protection.

Read our [2023 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.



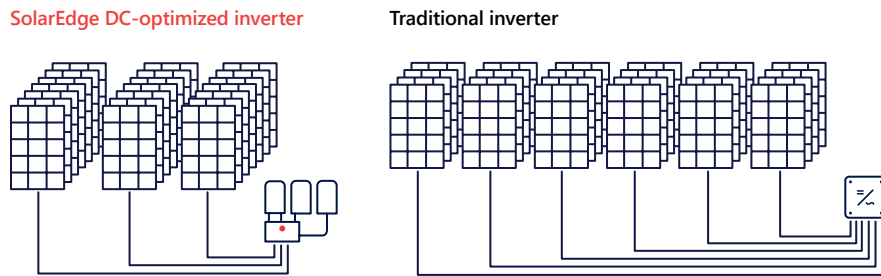
## Achieve Higher Lifetime Value

### 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.

### SolarEdge solutions require less wiring:



### Greater O&M Savings

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

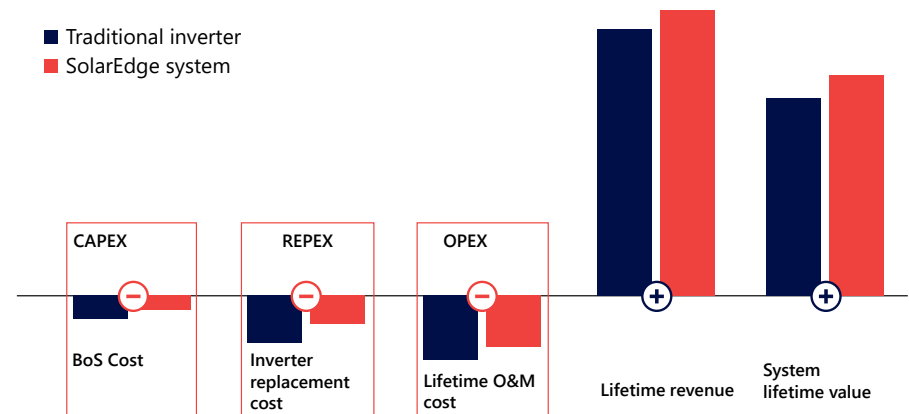
Our module-level monitoring and remote troubleshooting capabilities transforms O&M from a manual, resource-intensive process to an automated, at-a-glance service, ensuring that every plant is performing to the best of its ability at all times.

### 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 to the customers during the asset lifetime.

### Lifetime PV system cost and revenue:



## Safe & Cyber 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, meeting and exceeding NEC code requirements, including NEC 2014, 2017, 2020 and UL3741 PV Hazard Control.

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

#### Prevention

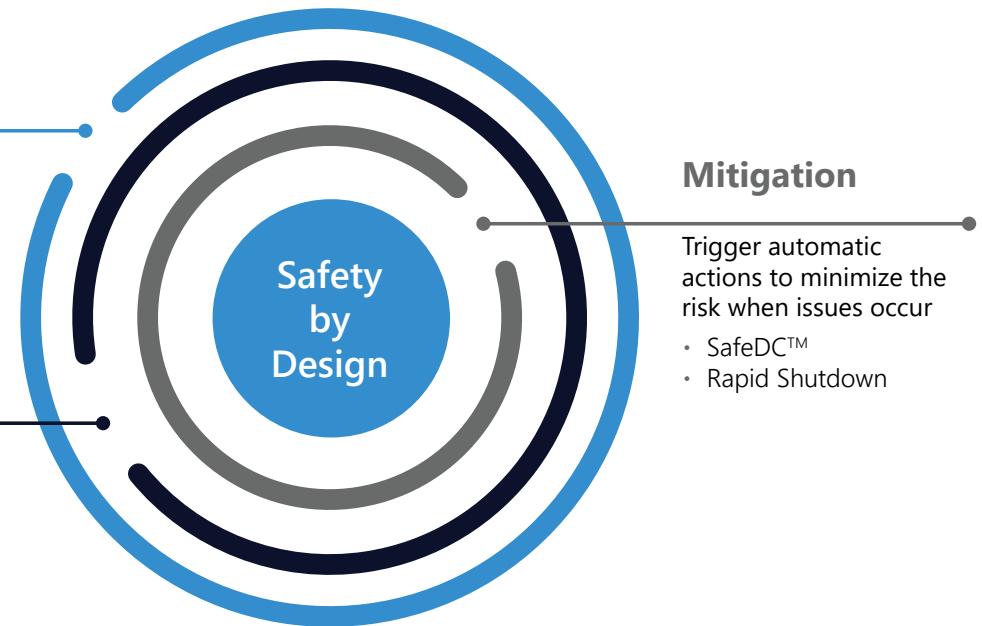
Identify early signs of electric arcs at the module level

- Sense Connect
- Built-in temperature sensors

#### Detection

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

- AFCI
- System alerts



#### Mitigation

Trigger automatic actions to minimize the risk when issues occur

- SafeDC™
- Rapid Shutdown

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

Learn more about SolarEdge  
PV safety features



## Safe & Cyber Secure

### Setting the standard for solar cybersecurity

Just like solar safety, solar cybersecurity is non-negotiable. By partnering with SolarEdge you get extra 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.

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.

User data and energy usage data is securely transferred and stored, ensuring maximum data privacy and protection from cyberthreats.

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.

 Visibility & control

 Network security

 Data security

 Device security



## Optimized

### 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 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 different roof facets, or in irregularly shaped fields and sloped terrains.

### Energy optimization across the ecosystem

SolarEdge optimizes energy generation 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 C&I 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 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

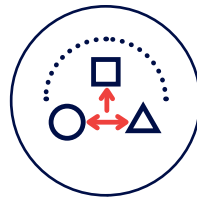
SolarEdge enhances operational efficiency by integrating all devices across our energy ecosystem, including external sensors, and employing an open API approach for third-party applications.

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





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# Our Rooftop Offering



1.32MW Medline CT, USA



## 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 ensuring optimal performance for every site.

**PV Production**

**Energy Optimization Solutions**

SolarEdge ONE for C&I\*

SolarEdge ONE Controller for C&I **New**

SolarEdge Power Optimizers

SolarEdge Inverters

Examples of commercial rooftop applications:



\* Currently available for selected customers only

## 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



## 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

### SolarEdge ONE for C&I\*

A cloud-based energy optimization platform, designed specifically for C&I energy professionals.

Incorporating extensive customer feedback as well as our own vast expertise in commercial solar, SolarEdge ONE for C&I places an unprecedented amount of system data at your fingertips, enabling deep performance analysis, monitoring and advanced management capabilities across the energy site.

\* Currently available for selected customers only

Operate  
& Maintain

For EPCs and  
O&M teams

Optimize  
& Manage

For Energy  
Stakeholders

SolarEdge ONE for C&I orchestrates a site's entire energy portfolio, including:

### PV

SolarEdge inverters and Power Optimizers



### EV Chargers

Multiple charge points using third-party devices



### Building Assets

Onsite power consumption assets e.g. IOT energy devices, sensors, etc.





## SolarEdge ONE for C&I Software Scope

SolarEdge ONE for C&I includes a wealth of innovative capabilities designed to meet the varying needs of system stakeholders.

- EPC
- O&M
- Energy Stakeholders

### SolarEdge ONE for C&I

- / Digital Twin
- / Advanced Remote Operation
- / Improved Site Analysis & Reports
- / Module-Level Visibility
- / PV Fleet Management

#### Advanced EV Charger Management

- / Hardware Agnostic
- / Transaction Management
- / Dynamic Load Management

\$

#### Load Management

- / Integrates with HVACs, light systems, etc.
- / Visibility and Insights
- / Load Control and Optimization

Coming soon

\$

#### Advanced O&M

- / Report Builder
- / Customized Alerts and Dashboards
- / Satellite PR

Coming soon

\$

**Enterprise**

**Enterprise** | Integration, Insights & Automation

\$

## Energy Optimization Solutions

### SolarEdge ONE Controller (New)

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
- / Encased in a weatherproof, heat-resistant outdoor enclosure
- / Combines with SolarEdge ONE for C&I 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







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# System Comparison for Commercial Rooftops



700kW Harmons Grocery store, Santa  
Clara Utah, USA



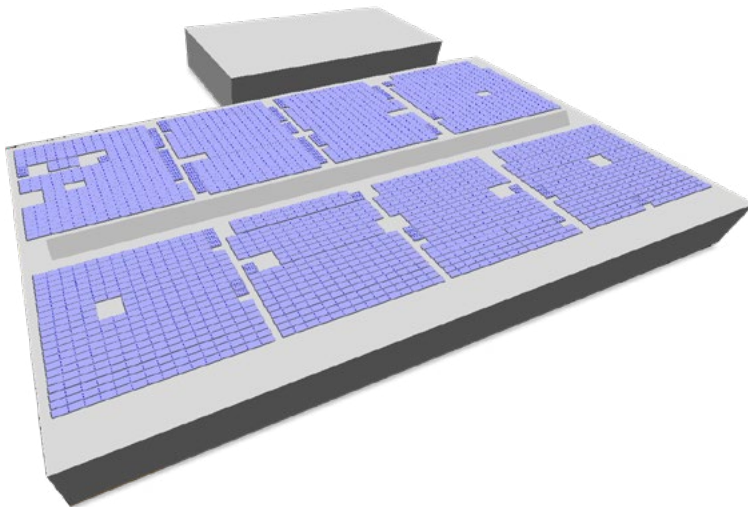
## 1.27MWp Rooftop System Comparison

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



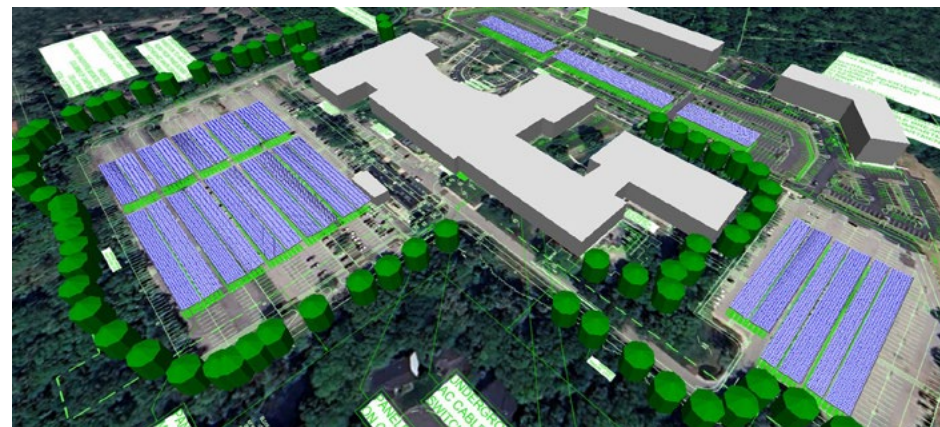
## 4.4MWp Carport System Comparison

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



6.2MW installation,  
Hartford Pike, Rhode Island,  
USA



# SolarEdge Ecosystem for Optimized Utility

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 the 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



SolarEdge ONE Controller

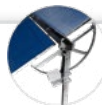
### PV Production



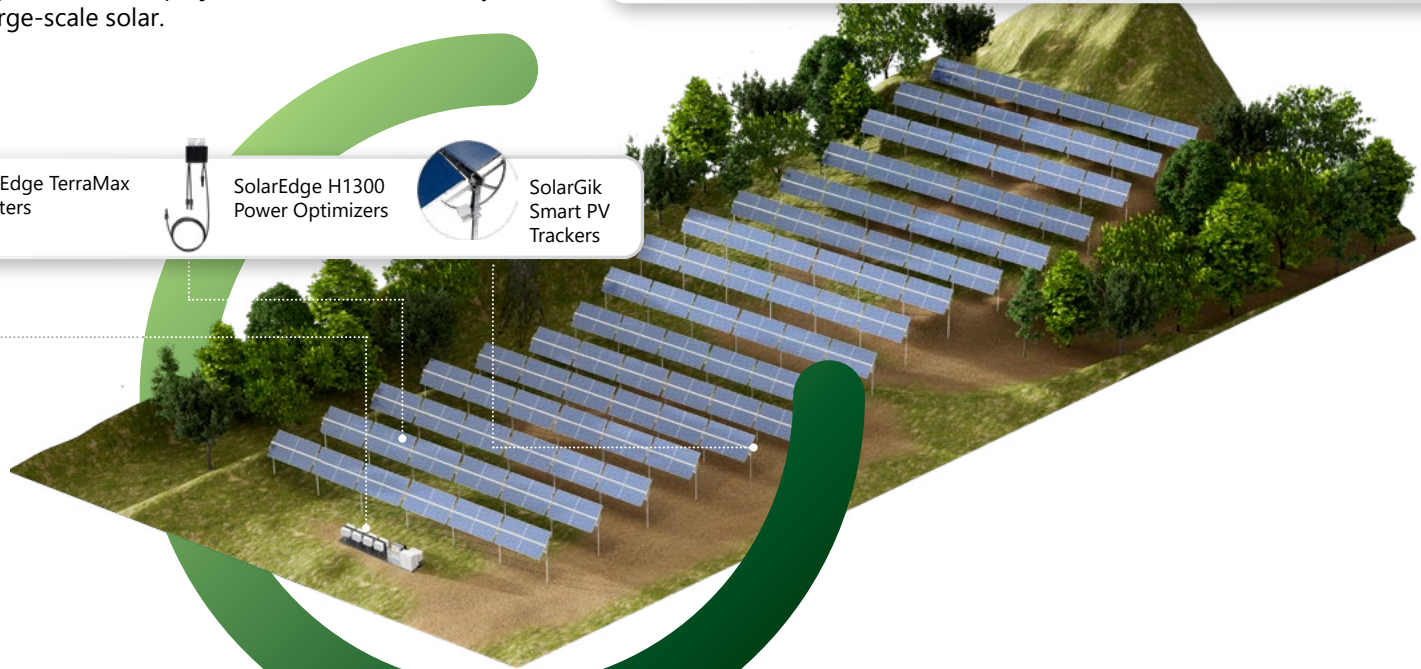
SolarEdge TerraMax Inverters



SolarEdge H1300 Power Optimizers



SolarGik Smart PV Trackers



Examples of Optimized Utility applications:



## PV Production

### 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





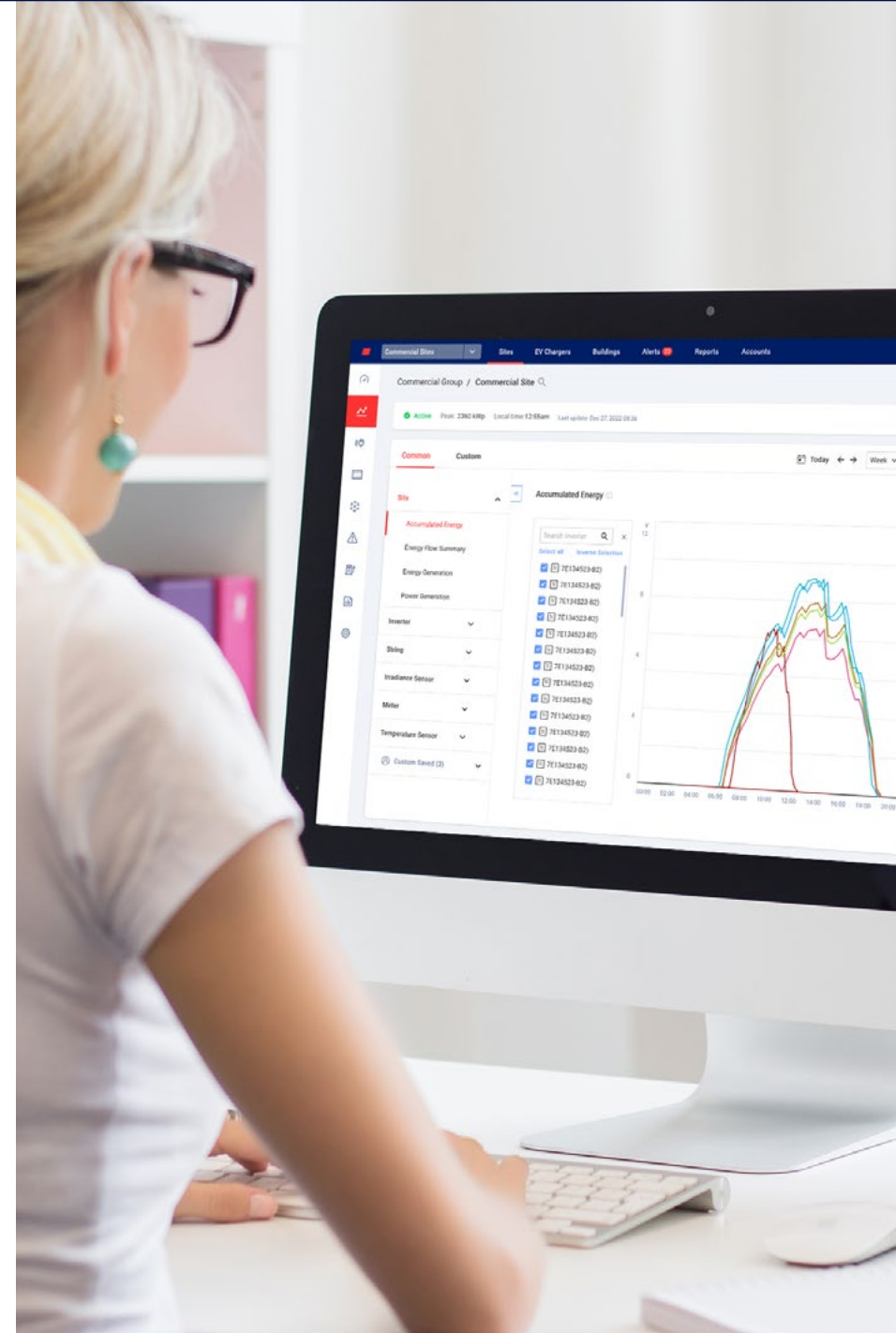
## Energy Optimization Platform

### SolarEdge ONE

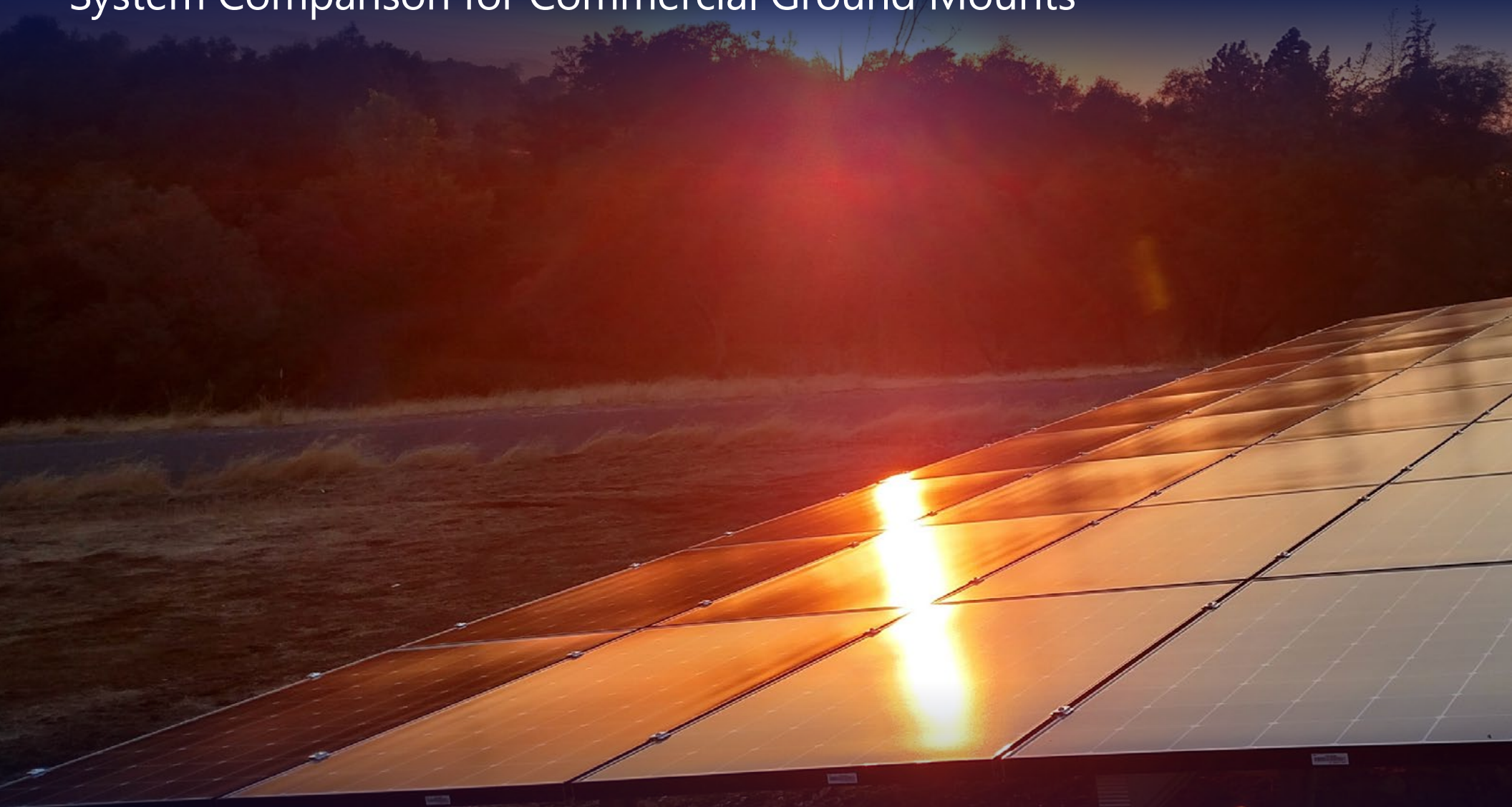
A cloud-based platform designed specifically for O&M professionals.

SolarEdge ONE offers advanced tools enabling continuous system operation and comprehensive monitoring for improved on-site performance. It's 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



# System Comparison for Commercial Ground Mounts



## 10.1MWp Ground Mount System Comparison

- / The ground mount system comprises 17,280 x 585Wp modules
- / SolarEdge system design:
  - / 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
<b>Overall BoS Cost Savings (c/W)*</b>	-	<b>2.69</b>

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



# Installer and EPC Tools

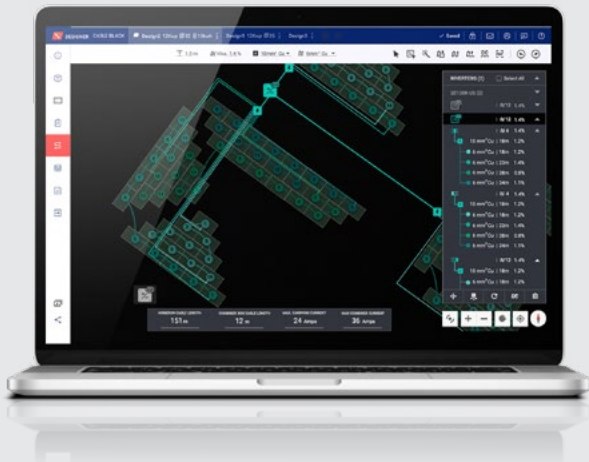




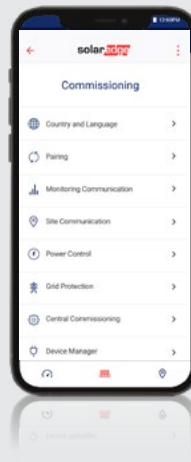
## Supporting our installers every step of the way

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



### Install: / SolarEdge Go / SetApp



### Operate and Maintain: / Monitoring Platform / SolarEdge ONE for C&I\*



\* Currently available for selected customers only

## EDGE Academy

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



