



Commercial Solution Overview



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 technology. By deploying world-class engineering capabilities and with a relentless focus on innovation, we create smart energy 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.

Award-winning technology



Product reliability

- 25-year power optimizer warranty, 12-year inverter warranty, extendable to 20 years
- SolarEdge products and components undergo rigorous testing, and have been evaluated in accelerated life chambers
- Reliability strategy includes proprietary application-specific integrated circuits (ASIC)

Global outreach

- Systems installed in over 130 countries across five continents
- 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

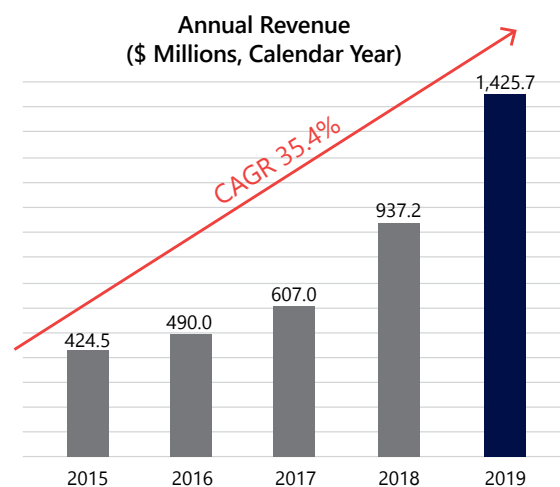


Bankability

- Approved by major banks and financial institutions worldwide
- SolarEdge (SEDG) is traded on NASDAQ
- A global leading PV inverter manufacturer, due to strong and stable finances combined with cutting-edge technology

Shipping since 2010

- Over 2 million inverters and over 55 million power optimizers shipped worldwide
- SolarEdge's monitoring platform continuously tracks over a million of installations across the globe



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.

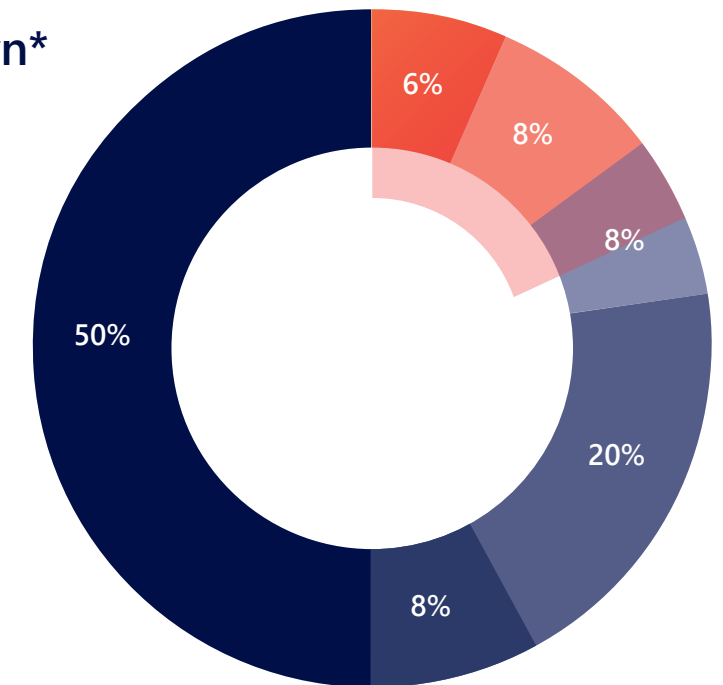


The Importance of Inverter Selection

Commercial rooftop installation cost breakdown*

Inverters account for less than 10% of the system cost but,

- Manage 100% of system production
- Influence up to 20% of system cost
- Control O&M expenses through PV asset management solutions



Therefore, the inverter selection is critical for the long-term financial performance of a PV system as it can maximize energy production and reduce lifetime costs.

- Inverter
- Electrical BOS
- Other
- EPC margin
- PV modules
- Structural BOS

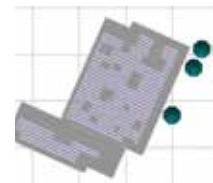
* Based on NREL 2017

Maximum Energy Yield

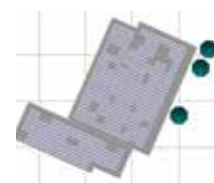
More power from the rooftop

Increase your system capacity with more modules on the roof

Flexible site design > More modules on the roof > **More power**



Traditional inverter | 149.5kW DC



SolarEdge | 200kW DC
34% more power

Optimized module production

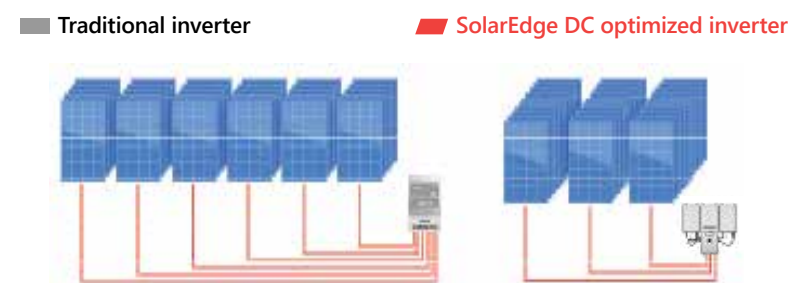
SolarEdge mitigates power losses due to mismatch between modules for maximum power generation from each module. With SolarEdge, weaker modules do not affect the strong ones. Performance benefits are validated by leading third-party testing facilities.

Common reasons for module performance mismatch

Transportation damage	Different tilt & orientation	Thermal mismatch	Partial shading	Soiling	Manufacturing tolerance

Simplified electrical design

Less electrical components for lower cost and improved reliability



Advanced Safety, Improved O&M

Cost-saving maintenance

- / Free module-level monitoring for 25 years
- / Maintenance teams "Know Before They Go" reducing truck rolls to solve issues
- / Connect on the go and monitor your system on your phone, tablet, or computer
- / Low Cost of Ownership:
 - / 25-year warranty on power optimizers
 - / 12-year warranty on inverter – low-cost extension to 20 years



Future compatibility and warranty

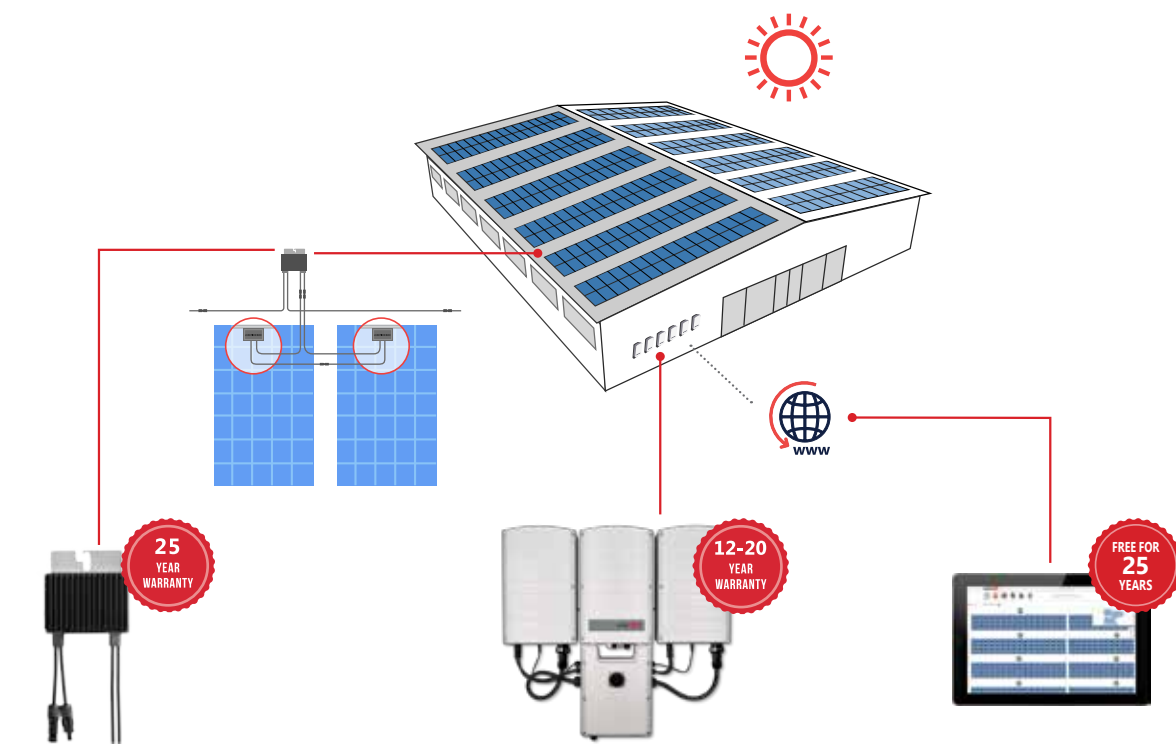
- / Low cost inverter replacement out of warranty
- / Future module compatibility (replacement and extension)
 - / New modules can be utilized in the same string with old ones

Advanced Safety

The SolarEdge solution includes inverter-embedded rapid shutdown functionality without the need for additional roof-mounted devices. The function de-energizes PV source circuits from all sources to less than 30 Volts within 30 seconds

- / With SolarEdge whenever AC power is off, DC string cables are automatically de-energized
- / Power optimizers automatically shut down the DC voltage in the string cables to protect installers, maintenance personnel and firefighters
- / The SolarEdge inverter solution meets the most advanced safety standards:
 - / NEC 2011 AFCI Compliant | NEC 2014, 2017 and 2020 Rapid Shutdown Compliant
 - / Meets FM global property loss prevention data sheet (1 -15) engineering requirements

Commercial System Diagram



P801 - P950 2 to 1 power optimizers

- Module-level MPPT - no mismatch power losses
- Strings of uneven length, modules on multiple azimuths and tilts
- SafeDC™ - designed for automatic module-level safety shutdown

9kVA-120kVA three phase inverters

- Specifically designed to work with power optimizers
- Superior efficiency
- Easy installation, including 2-person install for large capacity models
- Built-in communication hardware, with optional cellular plug-in
- Integrated DC Safety Switch
- Integrated RS485 and Type 2 DC & AC surge protection (for selected models)
- Embedded export limitation
- Simple, step-by-step inverter activation and commissioning with the SetApp mobile application

Monitoring platform

- Full visibility of system performance
- Remote, module-level troubleshooting

Performance monitoring

- Calculate site performance ratio and measure environmental conditions, using environmental sensors or a satellite-based service

Comprehensive Service Suite

SolarEdge supports you throughout your PV project life cycle. We provide the tools and services to help you grow your business with us.



Project design & pre-sale



Project execution



Operation & maintenance

1MWp Ground Mount System Comparison

Comparison of a 1MWp SolarEdge solution to an identical system with a traditional string inverter

The system, in Southbridge MA, comprises of 3,180 × 315Wp modules. One system was designed with 7 × SE100KUS and 1 × SE66.6KUS SolarEdge inverters and 1,610xP700 power optimizers in a 2:1 configuration. The second system was designed with 13 × 60kW traditional string inverters.

The SE66.6KUS & SE100KUS models are three phase inverters with synergy technology, combining large capacity with reduced installation time and cost.

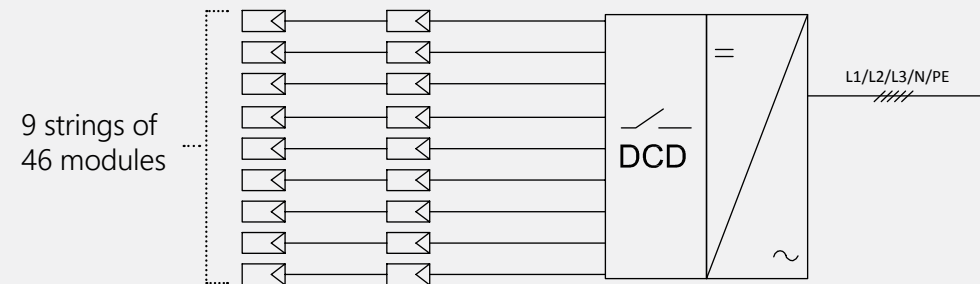
Energy comparison

Helioscope was used to simulate the first year yield of both systems. 25-year yield was calculated assuming 1% annual degradation and 0.12% annual mismatch growth due to uneven aging. Site assumption was no expected shading and all modules are pointed in the same angle and orientation.

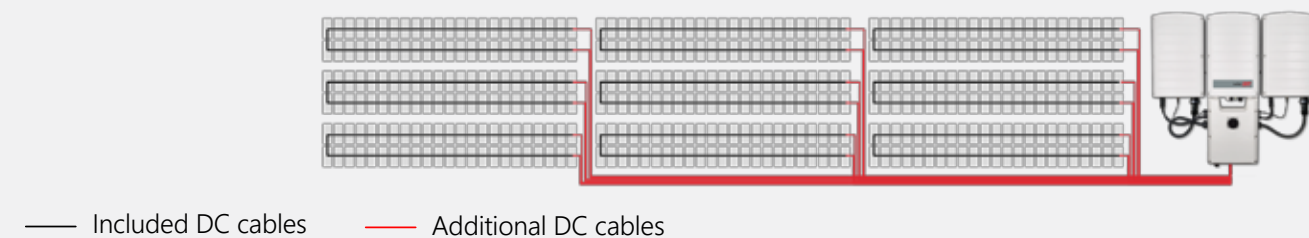
	Traditional String Inverter	SolarEdge System	SolarEdge Advantage
Year 1 yield (MWh)	1,395	1,419	1.7%
Year 25 yield (MWh)	1,030	1,079	4.8%
25 years cumulative yield (MWh)	30,267	31,224	3.2%

Electrical diagram comparison

SolarEdge DC optimized inverter solution | Total of 69 strings



SolarEdge cabling diagram

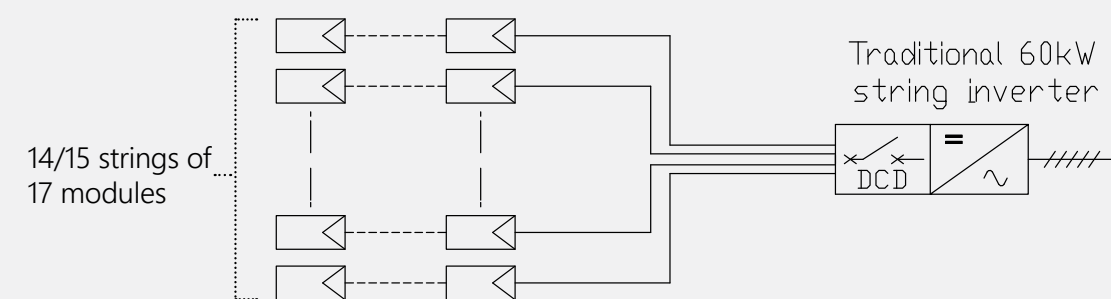


BoS comparison

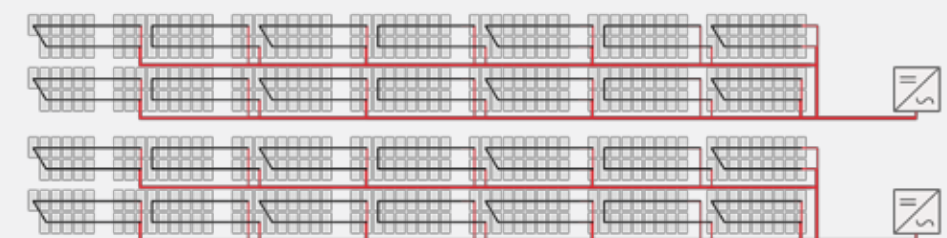
	Traditional String Inverter	SolarEdge System
DC power (kWp)	1,001.4	1,001.7
AC power (kVA)	780	766
DC/AC sizing	1.28	1.31
Modules	3,179	3,180
Inverters	13	8
No. of strings	187	69
Modules per string	17	46/48
DC Cable length (ft)	31,042	11,915
AC Cable length (ft)	10,250	5,020
Cable length (%)	100%	36%
AC combiner box (pcs)	2	2
Data logger (pcs)	1	-
BoS cost saving*	-	2.2 c/w

* Estimated saving on labor and materials for DC and AC BoS

Traditional string inverter system | Total of 187 strings



Standard inverter cabling diagram



19.5GW of Systems Shipped Worldwide

Ground mounts



Farms and agriculture



Industrial rooftops



Public buildings









Carports, floating systems and safety



SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

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The SolarEdge logo, featuring the word "solaredge" in a lowercase, sans-serif font. The "solar" part is white, and the "edge" part is white with a red rectangular background behind the letters "e", "d", and "g".

solaredge