



Safety First with SolarEdge C&I Solutions

Clean Energy. Spotless Record.

Choose a Solution Synonymous with Safety

With a rise in local government incentives and a growing call for renewable energy as a clean, cost-effective alternative, commercial solar is gaining speed. And so is the need for safe solar.

Protection of people and assets is your number one concern, and our number one priority. With a robust, secure design – offering resiliency and rapid ROI – our solutions allow stakeholders to sit back, relax, and enjoy the savings for years to come.

SolarEdge Stands Apart

While risk of incidents among most commercial solar systems is relatively low, SolarEdge takes safety further with the ability to track, isolate and mitigate issues at the module-level. This offers a much more comprehensive view than most conventional systems, along with the enhanced ability to resolve issues in a timely manner.

On the Cutting Edge of Safety

Favored by solar insurance companies around the world for our added financial security, SolarEdge minimizes risks through a built-in PV safety suite, which meets and surpasses the most stringent international standards, including FM Global's DS 1-15 engineering requirements.

Safety at the Module Level: Track. Isolate. Mitigate

By attaching our Power Optimizers to each solar module, EPCs, installers and O&M personnel can easily track, pinpoint, and resolve issues at any point along a string with surgical precision. Our Safety By Design approach provides a comprehensive and holistic PV safety solution that includes the following features and benefits*.



Track

SolarEdge Sense Connect

Monitors Power Optimizers' connectors, identifying improper connections and possible malfunctions for early detection and mitigation of arc risks.

Built-in Temperature Monitoring

Thermal sensors detect faulty wiring that can potentially cause electric arcs.

Arc Fault Prevention

Provides a module-level arc fault prevention mechanism



Isolate

Arc Fault Circuit Detection and Interruption

- Helps detect and stop an electric arc through automatic inverter and module level-shutdown for string lengths up to 400m
- Proven technology protecting over 1M SolarEdge inverters worldwide

Module-Level Monitoring

Sends automatic notifications on system issues, preventing potential safety risks



Mitigate

SafeDC™

Individually reduces the voltage of each solar module to touch-safe DC levels during grid failures or inverter shut downs, always within minutes.

Rapid Shutdown

- Helps conductors discharge at safe voltage levels within 30 seconds
- Compliant with NEC 2014, 2017 and 2020

Remote Troubleshoot with Module-Level Monitoring

Benefits of SolarEdge

- Through early-warning alerts at the module and system level, system owners and operators gain the comprehensive ability to understand and resolve any issue without rolling a truck.
- Reports performance loss or safety risks throughout the system lifetime
- Enables remote, preventative maintenance well in advance of a significant event

Drawbacks of conventional PV systems

- No way to detect/mitigate module-level issues
- Systems with external Rapid Shutdown boxes may not offer safety monitoring, which can lead to undiagnosed problems and surprise maintenance costs
- More maintenance time and labor is required to examine system, test and locate issues

* Safety functionalities above may vary between different inverter models and firmware versions, and are applicable when inverter is turned on

Make PV Safety Your #1 Priority

Edison High School, Minnesota

“We care about the long-term success of our clients’ projects. We chose SolarEdge for their ability to meet NEC rapid shutdown codes, high quality, and their exceptional safety record in the market. SolarEdge products maximize energy production while protecting our customers from the pitfalls of non-MPPT solutions.”

Candice Michalowicz, Co-Founder and Managing Member, C2 Energy Capital



Radio Flyer, Illinois

“SolarEdge was the obvious choice because of its design flexibility—longer strings mean we can add more modules at less cost and stay within our margins. Plus, their patented Power Optimizers give us the unique ability to mitigate shading issues through module-level control. Finally, and most importantly, SolarEdge’s focus on system protection with advanced fire safety features made it easy to comply with Chicago’s strict safety guidelines and the latest NEC 2017/2020 requirements.”

Joe Gordon, Sr. Project Developer, Sunvest



Medline Manufacturing, Connecticut

“We chose SolarEdge to supply the inverters and Power Optimizers for this project for several reasons. First, its state-of-the-art technology produces more electricity in cloudy regions, like the Northeast, due to superior design and increased energy output by tracking the maximum power point of each module. Plus, using reliable and NEC 2017 compliant products from SolarEdge results in a safer system with rapid shutdown and higher system uptime.”

Alex Dembitzer, Founder, SkyREM, LLC and Sky Power, LLC



Agro-Industrial Plastics, Iowa

Iowa is very up-to-date on the electrical code—an early adopter of NEC 2017, and SolarEdge’s Rapid Shutdown solution provides the best combination of technology and cost. Our client, Agri-Industrial Plastics preferred SolarEdge’s module-level monitoring capabilities.”


Amy Van Beek, CMO, Ideal Energy



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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Watch our
safety video!



solaredge