

YOUR COMMERCIAL SOLAR SPECIALISTS

**What can we do
for your business?**



About FDG Group

**East Midland Energy Efficiency Award Winners
2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024**

Are you ready to harness the sun?

Great! We turn businesses into power stations, by installing, delivering, and servicing sustainable energy solutions.

With a mission to promote environmental stewardship and reduce energy costs, we bring innovative solar technology to our clients, helping them transition to a cleaner, greener future.

Founded on quality, integrity, and customer satisfaction principles, FDG Group has quickly become a leader in the solar industry.

Our team of certified professionals combines extensive experience with a passion for renewable energy, ensuring that every installation is executed with precision and care.

From initial consultation to final installation and beyond, we are committed to guiding you through every step of the solar journey, offering bespoke solutions that meet your unique energy needs.

Our comprehensive services include commercial solar panel installations for manufacturers, councils and enterprises. We offer intuitive system design, maintenance, and monitoring for all sites.

Shareholders can rest easy knowing only the highest quality materials and state-of-the-art technology is used to ensure maximum efficiency and longevity for your solar investment.



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FDG GROUP LIMITED is a credit broker and not a lender. FDG GROUP LIMITED is a registered company in England and Wales. Company Number: 09188124. VAT Number: 222-5751-27. FDG HQ, Renewables House, Nottingham, NG41RZ.

The government offers a few capital allowances for commercial solar panels, including the Annual Investment Allowance (AIA) and the 50% First Year Allowance:

Annual Investment Allowance (AIA)

Businesses can deduct the entire cost of a new solar panel installation from their taxable profits in the year of purchase if the total cost is under £1 million. This is especially beneficial for small and medium-sized enterprises (SMEs).

50% First Year Allowance

Companies can deduct half of the cost of new solar panel installations from their profits in the first year of installation. The remaining 50% is written down at 6% in subsequent years. This allowance was extended until March 31, 2026.

Solar panels are considered "Special Rate Assets" and are subject to a 50% special rate allowance. Companies cannot claim full expensing for these assets.

Sole traders and partnerships can claim capital allowances as business expenses, while limited companies can deduct them from their profits.



World Leading Solar Technology



solaredge

Best for commercial properties with high-energy demands. If you're seeking cutting-edge technology, panel optimisation and desiring record-breaking efficiency, then this system is for you.



Designed to Generate Maximum Confidence

Backed by the world's biggest insurers, SolarEdge Commercial products use exclusive SafeDC technology to meet and exceed current safety requirements, ensuring the protection of people & property. And with their patented Power Optimizers attached to every module on the roof, businesses can see 10% more power over the system's lifetime.



Meeting & Exceeding Safety Standards

There's a reason why over 50% of Fortune 100 companies have SolarEdge on their rooftops. Ensuring peace of mind is no problem with advanced safety features, including:

- ✓ Fully integrated rapid shutdown
- ✓ Arc-fault detection & prevention
- ✓ Connector-level temperature sensing
- ✓ Surge protection

And with Sense Connect Technology built into their S-Series Power Optimizers, they can stop issues before they start:

- ✓ Get 100% visibility, down to the module level
- ✓ Receive real-time alerts ahead of potential issues
- ✓ Relax with automatic shutdown capabilities

The Flexibility to Maximize Energy Production

With DC-optimization and precision sun tracking software on the roof, your businesses can expect up to 10% more energy over the system's lifetime.

- ✓ Soak up every drop with the ability to place modules and Power Optimizers at all angles, tilts, and orientations
- ✓ Reduce module-mismatch, shading issues—modules in direct sunlight will make up for any that underperform
- ✓ Increase uptime with module-level monitoring and automatic alerts



High quality installation is matched with safe procedures, managed by our in-house Consultancy to ensure all measures are kept to an incredibly high standard.

Supply Chain

We purchase industry leading products renowned for their quality and lengthy insurance backed warranties up to 30 years.

SafeDC

SafeDC™ is a built-in module-level safety feature that minimizes the risk of electrocution from high DC voltage. It ensures DC voltage is reduced to touch-safe levels when the inverter is shut down, within up to five minutes, enabling safe maintenance and emergency intervention.

Rapid Shutdown

Rapid shutdown allows fast discharge of conductors to 1 V, within 30 seconds. The power in the modules and string wires are automatically reduced so firefighters or first responders can work safely during daylight.

Arc Fault Detection and Prevention

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Built-in Temperature Monitoring

Thermal sensors proactively monitor and detect faulty wiring that can potentially cause overheating connections or electric arcs.

Module-Level Monitoring

Module-level monitoring provides real-time insight that acts as an early-warning system with automatic alerts and notifications on system issues. Preventative maintenance using remote diagnostics can be performed well in advance of any significant event. It's easy to access from a computer, smartphone or tablet.

Workmanship Warranty

We guarantee that the installation will be carried out using reasonable care and skill. The guarantee period for the installation shall be 2 YEARS from completion of the original contract.

Three Phase Commercial Inverter

Maximize energy production, safety, and achieve significant savings.

We can oversize the inverter by up to 175% and this includes massive benefits to you:

- Higher energy yield: An oversized inverter can help a solar system reach its maximum power for longer, which can lead to higher energy yields over the day.
- Improved efficiency: Oversizing can improve the average efficiency of the solar system.
- Cost savings: Oversizing can help save money in the long run.
- Future capacity: Oversizing can save the expense of upgrading the inverter when more panels are added to the system in the future.



Faster Installation & Easier Maintenance

We like to get more done in less time, and minimize your operation costs. We can fit commercial units in rapid time, with Solar Edge's lightweight, and modular design built for two engineers to work simultaneously. That's less disruption to your site, and smaller labour costs which we then pass on to you.



FDG GROUP

Battery Overview

SolarEdge Commercial Storage System - CSS-OD

Intelligent storage. Far beyond a battery.

SolarEdge CSS-OD* is a 102.4kWh-rated solution, installed outdoors or indoors, with a pre-assembled battery cabinet and battery inverter that connects seamlessly with your SolarEdge PV system.

We can provide a full monitoring service, tracking the capabilities and management of your battery's performance, based on dynamic algorithms that consistently analyze real-time data and user preferences.



Robust safety measures for enhanced protection

- Advanced safety mechanisms: Fire detection, double fire suppression, and AC-DC surge protection
- Multi-sensor security: For protecting against flooding and overheating.
- Integrated fault detection: Ground faults, leakage faults, and reverse polarity are monitored continuously.
- Dual-string design: Engineered for higher resiliency.
- Proactive monitoring: Software promptly detects issues to minimize downtime.
- Cyber safety: Employs a single gateway for ensuring inspection and analysis of all communications, to protect against unauthorized access.

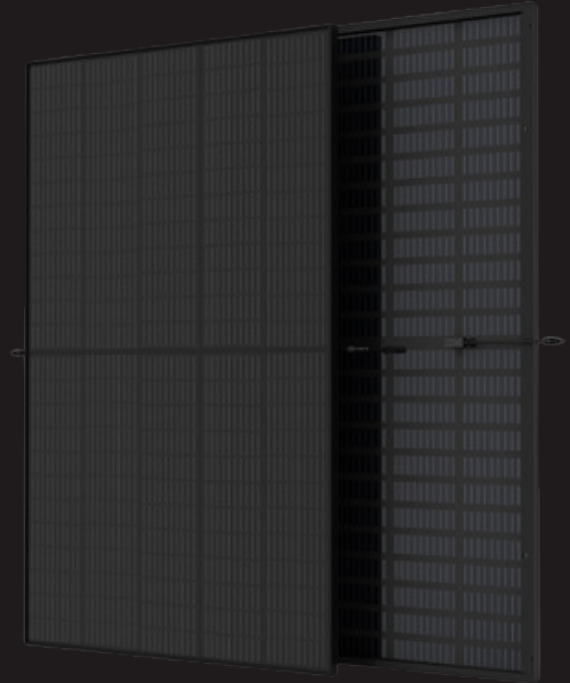


Vertex S+ Solar Panel

Vertex S+ Dual Glass Monocrystalline Module - 450W Maximum Power Output.

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Small in size, bigger on power

- Up to 450W, 22.5% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping, lower series resistance, improved current collection and enhanced reliability
- Reduce installation cost with higher power bin and efficiency
- Boost performance in warm weather with low temperature coefficient and operating temperature

Dual-glass Design, more secure and sustainable

- Upgraded dual glass of Vertex S, less prone to micro-cracks and scratches on the back during installation
- Excellent re rating, weather resistance, salt spray, sand dust, ammonia performance which is fully applicable in cities, high temperature, humidity area and harsh environments

Ultra-low Degradation, longer warranty, higher output

- First-year degradation 1% and annual degradation at 0.4%
- Up to 15 years product warranty and 30 years power warranty

Solar PV Optimizers

Optimize Energy Production,
System Uptime and Safety.

Ideal for rooftop or ground-mount solar projects, SolarEdge DC-DC converters connect to every two PV panels onsite to ensure maximum production at the panel level.

Including Power Optimizers increase overall system yield and revenue by tracking the maximum power point of each individual panel and providing panel-level performance data, while ensuring maximum system safety through its unique safety features.



Industry-Leading System Safety

Maximize protection of people and property with SolarEdge's advanced, built-in safety mechanisms:

SafeDC™ - automatically reduces high system voltage to touch-safe levels during inverter or grid shutdown

Arc fault prevention - combines with SolarEdge inverters to automatically detect and terminate electric arcs at the panel level

Stay in the know with real-time alerts that help identify and resolve any system issues.

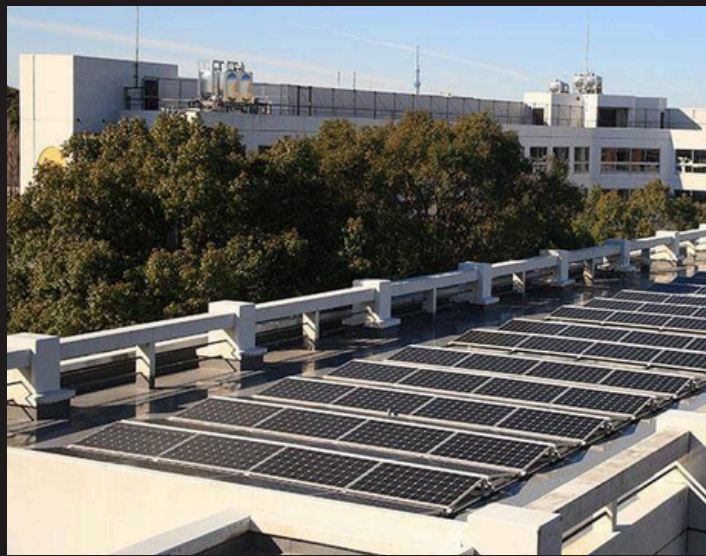
Upgrade your Solar Optimizers to S-series...

Sense Connect - patented SolarEdge technology that monitors Power Optimizers' connectors, identifying improper connections and possible malfunctions from connector wear and tear for arc risk prevention

Japan's First Renewable Energy University Maximizes Solar and Safety with SolarEdge. Chiba University of Commerce looks to become Japan's first 100% renewable energy university.

At a Glance:

- ✓ Installation date: March 2019
 - ✓ Location: Chiba University of Commerce, Japan
 - ✓ Installed Capacity: 450kWdc / 370kWac (divided amongst ten separate rooftop systems)
 - ✓ Modules: 1346 x LG NeON2 A5 335NIC-5
 - ✓ Inverters: 15 x SE25K-JP
- Power Optimizers: 673 x P730



Optimized Energy Production

The installers recommended SolarEdge's DC optimized inverter solution for this project primarily for its advanced safety features, maximized energy production, and design flexibility.

Comprehensive Safety

The university accommodates hundreds of students and faculty members, making PV safety an obvious concern and a top priority when selecting a suitable PV system.

With the SolarEdge solution complying with the most advanced international safety standards, both the university officials and installer were able to enjoy full peace of mind when making their decision.

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More Energy by Design

To maximize the system's capacity and to generate more energy, an east/west tilt racking structure was fitted on the rooftop. Generally, this mounting solution cannot be utilized with a traditional string inverter due to design limitations. However, SolarEdge Power Optimizers allow for multi-orientation and significantly longer strings that can easily adapt to the rooftop layout, generating overall higher revenue from the system.

By using the SolarEdge monitoring platform, the university can monitor real-time system performance anytime and anywhere. This information may be made accessible to faculty members, so they can compare daily, weekly, monthly, and yearly data to past performance and historical weather conditions. This helps students and faculty to learn about the environmental benefits of going solar, such as saved CO2 emissions, the equivalent number of trees planted, and more.

Manufacturing Plant Cuts Electricity Costs by ~30%

Leading biodegradable plastic packaging manufacturer reduces electricity costs and generates FiT revenue.

This manufacturing facility uses energy-intensive machinery that consumes approximately 300MWh of power each month. Using the PV energy generated from their SolarEdge system, Alta Plastic was able to lower their monthly electricity costs by ~30%.

Alta's objective was to maximize their energy output while ensuring they met Vietnam's FiT program regulations to export unused PV energy to the grid for revenue. SolarEdge's DC optimized inverter and Power Optimizer solution ensures that each module produces at its maximum, enabling the system to produce more solar energy and accelerate ROI..



Mission and Vision



Mission Statement

FDG Group aims to empower businesses to achieve energy independence and sustainability through cutting-edge solar solutions. We are committed to delivering high-quality,

cost-effective solar panel installations that help our clients reduce energy costs, minimize their environmental impact, and contribute to a greener future. Through innovation, exceptional service, and a passion for renewable energy, we strive to make clean energy accessible and beneficial for all.

Vision Statement

Our vision is to be a leader in the commercial solar industry, driving the transition to a world powered by renewable energy.

We aim to create a future where every business, large or small, can thrive sustainably by harnessing the power of the sun. By fostering a culture of innovation, integrity, and customer-centricity, we envision a brighter tomorrow where solar energy is the standard for commercial power solutions.