



An Inox Solar Americas Company



BOVIET SOLAR | PV MODULE | OVERVIEW

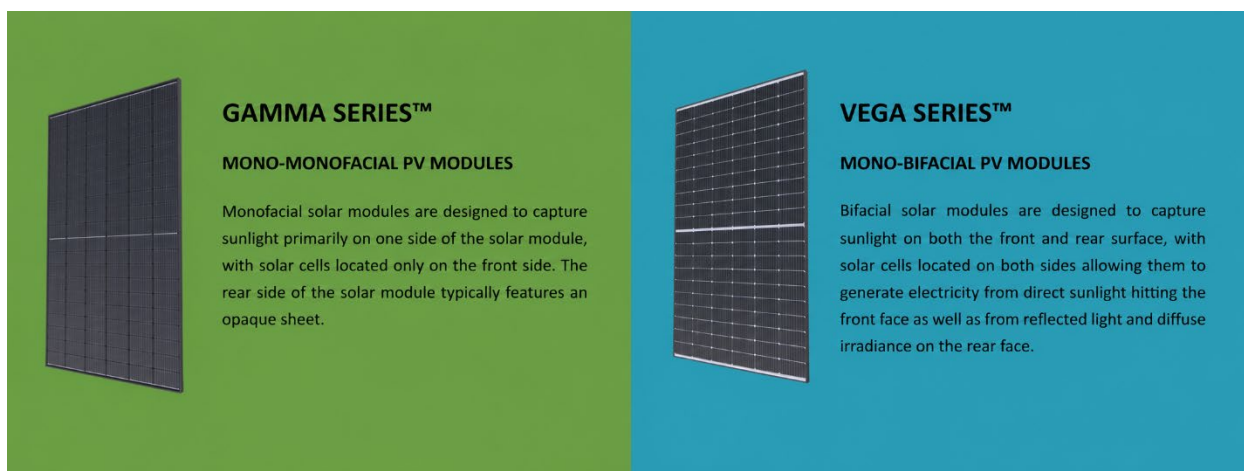
POWERING A SUSTAINABLE FUTURE

Engineered for Performance. Designed for Reliability. Built for Investment Confidence.

Boviet Solar, an Inox Solar Americas Company, offers a comprehensive portfolio of high-performance photovoltaic (PV) modules through its Gamma Series™ monofacial and Vega Series™ bifacial platforms, designed to support residential, commercial and industrial, community solar, and utility-scale applications worldwide. These module solutions are engineered to deliver strong energy yield, long-term durability, and consistent performance across diverse environmental conditions.

By combining advanced PV cell technologies with optimized module architecture and precision manufacturing, Boviet Solar enables developers, EPC contractors, investors, and asset owners to deploy flexible solutions aligned with project-specific technical requirements and financial objectives.

Boviet Solar's PV module portfolio includes Gamma Series™ monofacial modules (500W+) and Vega Series™ bifacial modules (600W+), engineered with low degradation support higher lifetime energy generation, improved long-term asset value, and more predictable system performance over 25–30 years of operation.



Boviet Solar’s module platforms, Gamma Series™ and Vega Series™, are developed to meet the evolving needs of modern solar projects. Gamma Series™ modules provide dependable monofacial performance across a wide range of applications, while Vega Series™ bifacial modules are designed to capture energy from both the front and rear sides, increasing total energy yield under suitable site conditions.

Gamma Series™ modules are optimized for distributed generation, rooftop, and commercial & industrial applications where space efficiency and stable output are critical, while Vega Series™ modules are engineered for utility-scale, ground-mounted, and tracker-based systems where maximizing total energy generation, reducing module count, and improving system-level economics are key priorities.

Module design focuses on optimizing how solar energy is captured, distributed, and converted under real-world operating environments. Advanced design features such as half-cut cell architecture, multi-busbar configurations, optimized string layouts, and bifacial structures improve electrical efficiency, reduce resistive losses, and enhance shading tolerance. These design elements are critical in ensuring strong performance under variable irradiance, temperature fluctuations, and complex site conditions.

Boviet Solar further integrates advanced PV cell technologies through its Altairon™ (PERC) and Galaxion™ (N-Type) platforms, enabling customers to select solutions that align with project economics, performance targets, and long-term asset strategies. Together, these technologies support higher efficiency, improved degradation behavior, and enhanced long-term energy yield.

Boviet Solar applies precision engineering and advanced manufacturing processes to ensure modules perform reliably over decades of operation. Engineering design incorporates robust junction box integration, optimized electrical configurations, and structural integrity capable of withstanding mechanical stress, wind loads, snow loads, and environmental exposure.

Manufacturing is conducted using high-precision automation, controlled production environments, and strict quality control systems. Each module undergoes rigorous in-line and

final testing to validate electrical performance, mechanical strength, and long-term durability. This integrated approach ensures consistency, traceability, and compliance with international quality standards.

With manufacturing operations in both Vietnam and the United States, including its Greenville, North Carolina facility, Boviet Solar combines global production scale with localized supply capability, supporting reliable delivery, reduced logistics risk, and alignment with evolving procurement and domestic sourcing requirements in key markets.

High-quality components, including cells, glass, encapsulants, frames, and electrical systems, are carefully selected and integrated to function as a unified, durable energy system. This is essential for minimizing risks such as moisture ingress, delamination, corrosion, and performance degradation over time.

Boviet Solar modules are engineered to deliver strong real-world performance beyond standard laboratory conditions. Performance is influenced not only by nameplate power, but also by low-light response, temperature coefficient behavior, bifacial gain potential, and long-term degradation characteristics. By optimizing these factors, Boviet Solar ensures that actual energy production closely aligns with modeled expectations, supporting accurate forecasting and financial planning.

For example, in a 100 MWdc utility-scale project, higher wattage bifacial modules can significantly reduce total module count while increasing overall energy generation, directly lowering balance-of-system (BOS) costs and improving long-term project economics.

Durability and reliability are validated through comprehensive testing programs, including resistance to PID, LeTID, salt mist, ammonia, sand, and dust exposure, as well as mechanical load and hail impact testing. Extended reliability sequences such as Thermal Cycling, Damp Heat, Mechanical Stress, and Humidity Freeze further confirm long-term module stability.

Boviet Solar's commitment to quality is supported by ISO-certified manufacturing processes (ISO 9001, 14001, and 45001), ensuring consistent production, defect prevention, and operational excellence. This quality-driven approach reduces operational risk, enhances system reliability, and supports long-term asset performance.

Boviet Solar modules are designed not only as individual components but as integral elements of a complete solar system. High-power output and optimized electrical characteristics enable longer string lengths, improved inverter utilization, and reduced balance of system (BOS) costs. This leads to fewer modules, less cabling, and simplified system design.

Modules are fully compatible with modern PV system architectures, including advanced inverters, mounting systems, and tracker technologies. This ensures seamless integration, efficient installation, and flexibility across diverse project configurations.

Through detailed performance modeling support, including PAN files and compatibility with PVsyst, Boviet Solar enables accurate system design, energy forecasting, and financial modeling. These capabilities are critical for project feasibility, engineering optimization, and lender due diligence.

By combining performance, reliability, and system-level efficiency, Boviet Solar modules help reduce LCOE, improve ROI, and enhance overall project value.

Boviet Solar PV modules are certified to internationally recognized standards, including UL and IEC requirements for safety, performance, and durability. Additional certifications such as IEC 61701 (salt mist), IEC 62716 (ammonia), CE marking, CEC listing, and third-party validation from TÜV Rheinland and ETL/Intertek ensure global market acceptance.

Environmental compliance is integrated into product design and manufacturing, with adherence to RoHS, PFAS restrictions, TSCA, and TCLP requirements. These measures support safe material usage, responsible lifecycle management, and reduced environmental impact, aligning with global ESG expectations and regulatory frameworks.

Boviet Solar's bankability is supported by multiple independent validations. The company has achieved Top Performer recognition in the Kiwa PVEL PV Module Reliability Scorecard, demonstrating strong performance under rigorous stress testing conditions. In addition, Boviet Solar has undergone independent engineering assessment by Black & Veatch, providing third-party evaluation of manufacturing, product reliability, and operational maturity.

The company's financial and operational credibility is further reinforced by BloombergNEF Tier 1 ranking, an "A-Class" bankability rating from Wood Mackenzie, and strong financial stability rankings from Sinovoltaics. These recognitions are widely used by developers, EPCs, investors, and lenders in procurement and due diligence processes.

Built to Last. Designed for Performance. Engineered for Investment Confidence.

Boviet Solar delivers high-performance PV modules powered by advanced cell technologies, engineered for durability, optimized for real-world energy yield, and supported by rigorous testing, global certifications, and independent validation. Through Gamma Series™, Vega Series™, Altairon™, and Galaxion™, Boviet Solar provides solutions that enable developers, EPCs, investors, and asset owners to reduce risk, optimize performance, and achieve stronger long-term returns.

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Boviet Solar, an Inox Solar Americas company founded in 2013, is a leading solar technology company specializing in the manufacturing of advanced monocrystalline Galaxion N-Type™ PV cells and premium Gamma Series™ monofacial and Vega Series™ bifacial PV modules. Boviet

Solar's top-performing PV modules are engineered for a wide range of applications, including residential, commercial, industrial, community solar, and utility-scale solar projects.

Boviet Solar combines business acumen, financial strength, technological expertise, and manufacturing excellence to deliver reliable, high-efficiency solar solutions to customers across the renewable energy industry. The company is strongly committed to sustainability, supply chain traceability, and compliance with U.S. and international trade standards while fostering long-term, trust-based partnerships throughout the energy sector. Boviet Solar has earned broad industry recognition for quality, reliability, and operational performance.

Boviet Solar has received multiple global bankability recognitions from leading independent research and analytics organizations. The company has been consistently ranked as a Tier 1 PV Module Manufacturer by Bloomberg New Energy Finance (BNEF) since 2017, recognized among Wood Mackenzie's A-Class Bankable Global PV Module Manufacturers since 2024, and listed among Sinovoltaics' Top 10 Most Financially Stable PV Module Manufacturers since 2024. In addition, TeraWatt PV has ranked Boviet Solar as Global Silver plus PV Module manufacturer, while Kiwa PVEL has recognized the company's products as Top Performers in its PV Module Reliability Scorecard since 2019. Collectively, these distinctions reinforce Boviet Solar's strong bankability, financial resilience, manufacturing credibility, and long-term reliability.

Boviet Solar operates its U.S. PV module and PV cell manufacturing facility in Greenville, North Carolina, supporting domestic solar deployment through localized production, supply chain stability, and efficient logistics. As an Inox Solar Americas company, Boviet Solar operates within a broader renewable energy platform under Inox Clean Energy and the INOXGFL Group, strengthening the company's long-term positioning, operational stability, and alignment with evolving U.S. market, policy, and regulatory requirements.

For more information, please visit www.bovietsolar.com, www.inoxclean.com, www.inoxgfl.com