

# SOLAR PANELS

## BOVIET SOLAR

Boviet Solar USA's high performance polycrystalline and monocrystalline, 60 and 72 cell, solar modules are manufactured in first-class, state-of-the-art cell and module manufacturing facilities with an underlying emphasis on quality, says the company.

The fully integrated facilities are accredited with ISO 9001, ISO 14001, and OHSAS 18001. All modules undergo a stringent quality control check and are certified to UL1703, Type 1 fire rating, high salt and ammonia resistance TUV Rheinland, CEC listed and feature three electroluminescence screens on cells and module. [www.boviesolarusa.com](http://www.boviesolarusa.com)



## CANADIAN SOLAR

Canadian Solar recently introduced the Smart DC module (CS6P-260|265P-SD), featuring an innovative integration of the company's module technology and SolarEdge's power optimization for grid-tied PV application.

By replacing the traditional junction box with a power optimizer, the Smart module optimizes power output at module level. In addition, this module eliminates module-level mismatch and decreases shading losses, says the company. [www.canadiansolar.com](http://www.canadiansolar.com)



## ET SOLAR

ET Solar provides a wide variety of PV modules that are said to be suited for all types of installations: residential,



commercial, and utility. The vertically integrated supply chain allows the company to control the quality of its product throughout the entire manufacturing process. ET Solar offers a rich module portfolio to meet the diversified needs of its customers, the company says. [www.etsolar.com](http://www.etsolar.com)

## JINKOSOLAR

JinkoMX performs maximum power point tracking (MPPT) separately on each cell string, which is equivalent to three optimizers per module. This limits performance loss caused by soiling, shading, or unfavorable building orientation. No additional hardware is required, and there is no operational or installation labor impact, saving users time and money, says the company. [www.jinkosolar.com](http://www.jinkosolar.com)



## LG SOLAR

LG Solar is introducing the company's new NeON 2 modules with 'Cello Technology' that improves power output and appearance. LG NeON 2 modules produce energy from both the front and back in order to



increase efficiency. A reinforced frame design makes these modules durable in even the toughest weather conditions, says the company. [www.lg-solar.com](http://www.lg-solar.com)

## LUMOS SOLAR

Lumos Solar's LSX Module System consists of the LSX Frameless Solar Module and LSX Rail. The unique and proprietary through-bolt mounting method of the LSX



Module System results in a sleek, low-profile installation, which is most often used in overhead or building integrated applications. LSX blends solar power generation with functionality and architectural aesthetics.  
[www.lumossolar.com](http://www.lumossolar.com)

## REC SOLAR

The REC TwinPeak solar panel features 120 half-cut multicrystalline cells, four busbars, passivated emitter rear cell (PERC) technology, and a split junction box to provide enhanced reliability and performance for residential, commercial, and industrial markets. The panel is rated up to a 280 watt peak, delivering high power output (nearly 10 Wp) per module.  
[www.recgroup.com](http://www.recgroup.com)



## SOLAR FRONTIER

Solar Frontier's CIS modules generate higher energy yield (kWh/kWp) in real-world conditions than conventional crystalline modules, the company says. They are precision manufactured in Japan using fully automated production lines. Solar Frontier has shipped three GW of its modules to date, including modules for an award-winning 82.5-MW project in Southern California.  
[www.solar-frontier.com](http://www.solar-frontier.com)



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# WHAT'S IN YOUR LAMINATOR?

**Steinbach**  
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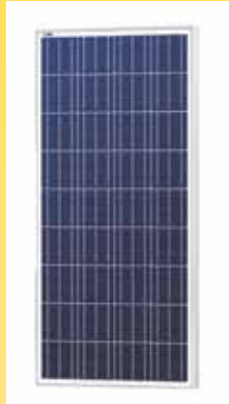
**SmartechOnline.com**  
**704 362 1922**

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## SOLARLAND USA

Solarland USA now offers C1D2 certified panels. These panels can be utilized in Groups A, B, C & D, T3 hazardous environments. These panels are all 12VDC nominal and offered in various configurations, ranging in power output from 12W to 150W.

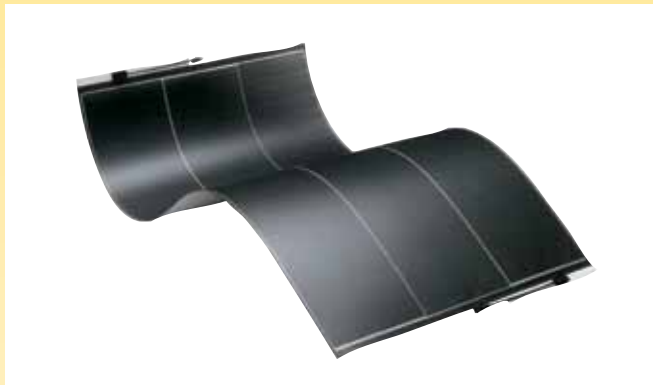
[www.solarlandusa.com](http://www.solarlandusa.com)



## SOLOPOWER SYSTEMS

SoloPower Systems' SP3 PV module is a flexible ultra-lightweight CIGS photovoltaic product, fully manufactured in the U.S., in Portland, Oregon. It is easily configured for multiple adhesive applications, enabling rapid installation and low-cost system integration with a wide variety of roof substrates such as EPDM, TPO, and PVC.

[www.solopower.com](http://www.solopower.com)



cell mismatches. Combining these module attributes with tenK's DUO system architecture generates up to 40 percent more energy from a solar project, says the company.

[www.tenksolar.com](http://www.tenksolar.com)

## TRINA SOLAR

Trina Solar's DUOMAX is an industry-leading PID-resistant, reliable, and durable dual glass frameless module. The product comes with a 30-year power warranty and has low annual degradation with higher lifetime power, says the company. The 1500V system voltage allows more modules per string, thus reducing BOS costs. The DUOMAX is engineered for extreme climates.

[www.trinasolar.com](http://www.trinasolar.com)



## SUNTECH

The average mass production cell efficiency of Suntech's HyPro solar module can reach 20.5%, the company says. The module sustains higher power output at 200W/m<sup>2</sup> compared to conventional modules in weak lighting conditions. The HyPro has a lower probability of micro-cracks and hotspots, making the modules less susceptible to malfunctions that lead to significant power degradation.

[www.suntech-power.com](http://www.suntech-power.com)



## TSEC

TSEC focuses on the production of high efficiency and high quality crystalline silicon solar cells, modules, and solar power plant construction and operation. The company's V-Series mono 280W/E series poly 260W features PID-free solar cells with high conversion efficiency performance. There is a 25-year limited warranty on power output and a 10-year limited warranty on workmanship. Maximum load capacity is up to 112 lbs/ft<sup>2</sup> by IEC 61215 and IEC 61730, and the panels are resistant to salt mist. The panels have positive power tolerance of +5/-0 Wp.

[www.tsecpv.com](http://www.tsecpv.com)



## TENKSOLAR

The tenK PV module cells are wired in a matrix, providing cell-level shade tolerance, eliminating hot spots, and dramatically reducing losses caused by



## YINGLI SOLAR

Yingli Solar manufactures high-quality crystalline silicon solar modules said to be ideal for a broad range of applications. Yingli's latest product, the YGE-U 1500 Series, is engineered for system voltages of 1500 V and features an aluminum frame. Ideal for next-generation power plants, it simplifies installation, reduces balance-of-system costs, and increases energy yield. [www.yingliamericas.com](http://www.yingliamericas.com)



## ZHONGLI TALESUN

Zhongli Talesun's independent manufacturing base of 210,000m<sup>2</sup>, 1.8-GW cell and 2.8-GW module capacity has enabled the company to be among the world's leading large-scale PV manufacturers, within which 800 MW of cells and modules are made in Thailand.

With a total investment of \$850 million, Zhongli Talesun has built a large state-of-the-art, fully-automated production line. The company's equipment comes from leading PV equipment manufacturers: Reis and Centrotherm of Germany, NPC of Japan, and Baccini of Italy. [www.talesun.com](http://www.talesun.com)



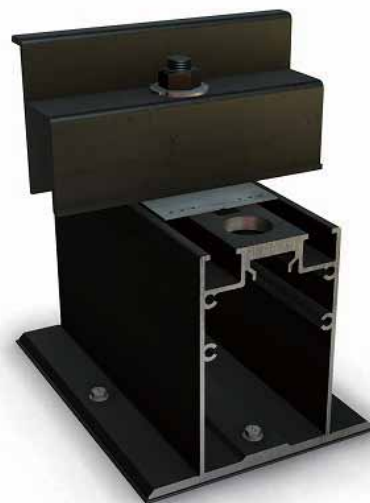
## ZNSHINE SOLAR

ZNSHINE SOLAR is a Tier 1 global PV solutions supplier and manufacturer of solar modules, including the company's ZXP6 72 cell series module. With operations and production facilities in China, Japan, and South Africa, it has a network of over 15 sales offices worldwide, including Germany, UK, U.S., Canada, and Japan, providing local customer service backed by global PV market experience. [www.znshinesolar.com](http://www.znshinesolar.com)

e

# RT-[E] Mount<sup>®</sup> E Mount AIR<sup>®</sup>

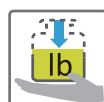
RT-[E] Mount is the only rail-less PV mounting system with integrated flexible flashing certified by the ICC.



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from top of roof to bottom line<sup>®</sup>

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