

CENTROSOLAR: E-SERIES Z MODULE

60 CELL

Engineered in Germany, Made in China

The Centrosolar E-Series PV modules are developed with the highest quality standards for all commercial and residential applications. Manufactured and tested under our strictest quality standards. Installed worldwide with field proven reliability and performance.

The Centrosolar E-Series modules engineered with 60 polycrystalline high-efficiency silicon cells, allowing higher power output per module. This configuration results in reduced installation and balance-of-system costs.

These modules have been designed to meet the performance and durability needs of weather conditions in North America - including ice, hail, snow, storm, high humidity, and extreme thermal fluctuations. Neither heat nor cold can harm the Centrosolar E-Series. It makes optimum use of available solar energy reliably, generating high energy yields.

Energy from High-Performance Products

The Centrosolar E-Series Z modules are available in white backsheets and silver or black anodized aluminum frames. The frame is designed with water drainage holes and grounding holes on four sides and slotted mounting holes on long sides. Modules are made with high quality materials including top branded EVA and chemical resistant and flame retardant back sheet and high-transparency low-iron impact-resistant tempered glass for lasting durability over the life of the product.

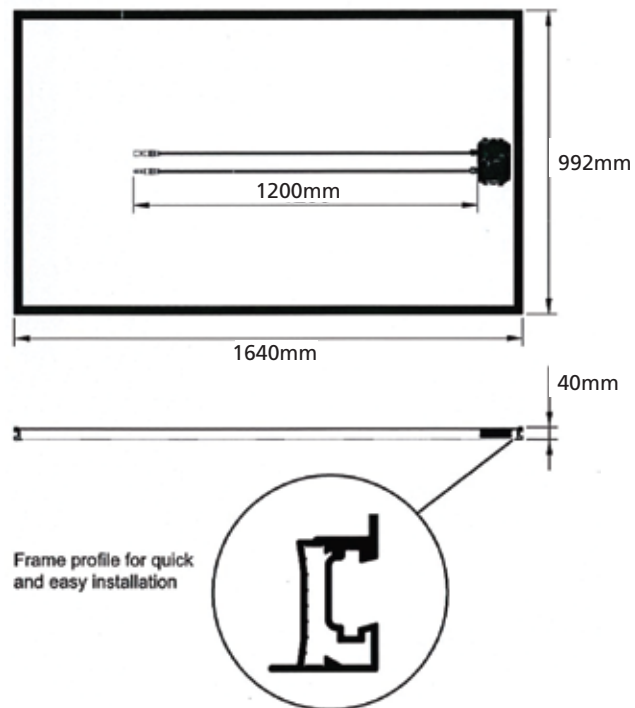
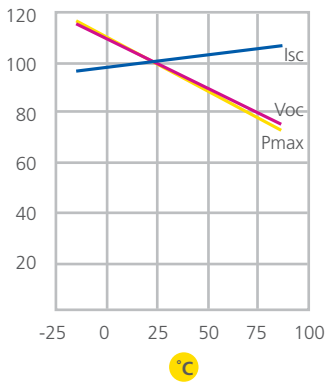
PREMIUM QUALITY GUARANTEE

- The module frame is the mounting system
- Positive power tolerance 0 to +5W
- 10 year product workmanship warranty
- Power warranty 25 year < 80% and 12 year < 90% of minimum peak power
- Proven field performance worldwide
- Manufactured to German quality and performance standards
- Internal by-pass diodes across 20 series cells resists effects of shading
- Conforms to UL 1703, ULC-ORD-C1703-01 and CE compliant



Technical Data

Module Frame / Backsheet Color	Silver-Clear Anodize / White Back			Black Anodize / White Back		
Module Number: Polycrystalline	E 230SW Z	E 235SW Z	E 240SW Z	E 230BW Z	E 235BW Z	E 240BW Z
Peak Power (Pmax) ** Watts	230W	235W	240W	230W	235W	240W
Voltage at Maximum (Vmp)	29.4	29.4	30.2	29.4	29.4	30.2
Current at Maximum Power (Imp)	7.82	7.99	7.94	7.82	7.99	7.94
Open Current Voltage (Voc)	36.5	36.5	37.0	36.5	36.5	37.0
Short Circuit Current (Isc)	8.3	8.3	8.6	8.3	8.3	8.6
Series Fuse	15A					
Maximum System Voltage	600V					
Temperature Coefficient (Pmax)	-0.459% / °C					
Temperature Coefficient (Voc)	-0.308% / °C					
Temperature Coefficient (Isc)	0.023% / °C					
Output Cable	#12 AWG (4mm) x 47.2" (1200mm)					
Connector Plug	Tyco SOLARLOK					
Load Rating	45lb/ft ²					
Weight lbs (kg)	42.59 lbs (19.318)					
Cells in series size (mm)	60 cells 6.1" x 6.1" (156 X 156mm)					
Nominal Operating Cell Temp. (NOCT)	46.6 °C					



**Standard testing conditions (STC): 1,000W/m², spectrum AM 1.5, cell temperature 25°C

