

Zero-rack System I



ET-P660250WWZ	ET-P660250WBZ
ET-P660245WWZ	ET-P660245WBZ
ET-P660240WWZ	ET-P660240WBZ
ET-P660235WWZ	ET-P660235WBZ
ET-P660230WWZ	ET-P660230WBZ
ET-P660225WWZ	ET-P660225WBZ



ET Solar's Zero Rack System I delivers one of the fastest, easiest and least expensive way to install PV arrays on tile roof, primarily for residential applications. With its ability to optimize attachment point spacing in both east-west and north-south axes, ZS I can offer up to a 25% reduction in roof attachment points- dramatically reducing the amount of time spent on the roof.

- Compatible with various roof surfaces such as Spanish tile, clay, concrete and slate tile roof.
- Dramatically reduces installation time due to integrated and auto-grounding hardware
- Low system weight due to ultra low parts and SKU count
- Eliminates clip hardware, long rails and cutting of rails
- Extremely roof friendly by reducing roof attachment points up to 25 %
- Only two special Zep Solar tools require for installation
- Provides aesthetically superior system due to low profile installation and array skirt
- Special tool, trainings and system knowledge require for theft to remove the system
- Compact packing reduces warehouse cost, space allocation, inventory tracking requirements and shipping cost
- Zero Rack System I provides best value for your capital investment
- 0 to +5W positive power tolerance
- 25 year linear performance warranty;
10-year warranty on materials and workmanship

sales@etsolar.com www.etsolar.com

Headquarters

Add: 27F, Galaxy
International Plaza, 7 Shanxi
RD, Nanjing 210009, China
Tel: +86 25 8689 8098
Fax: +86 25 8689 8097



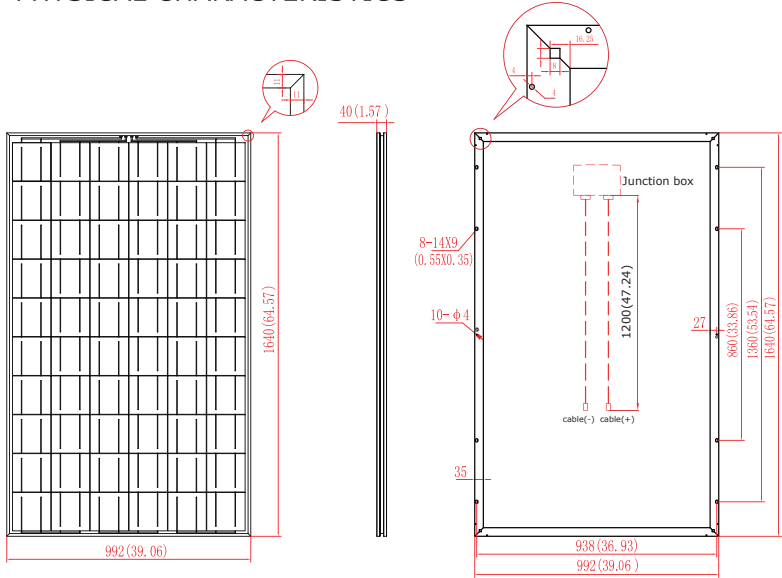
ET Towards Excellence

ELECTRICAL SPECIFICATIONS

Model type	ET-P660250WWZ	ET-P660245WWZ	ET-P660240WWZ	ET-P660235WWZ	ET-P660230WWZ	ET-P660225WWZ
	ET-P660250WBZ	ET-P660245WBZ	ET-P660240WBZ	ET-P660235WBZ	ET-P660230WBZ	ET-P660225WBZ
Peak power (Pmax)	250W	245W	240W	235W	230W	225W
Module efficiency	15.37%	15.06%	14.75%	14.44%	14.14%	13.83%
Maximum power voltage (Vmp)	30.71V	30.43V	30.23V	29.40V	29.40V	29.00V
Maximum power current (Imp)	8.14A	8.05A	7.94A	7.99A	7.82A	7.75A
Open circuit voltage (Voc)	37.44V	37.20V	37.00V	36.50V	36.50V	36.30V
Short circuit current (Isc)	8.80A	8.76A	8.64A	8.30A	8.30A	8.10A
Power tolerance	±3%	0 to +5W	0 to +5W	0 to +5W	0 to +5W	0 to +5W
Maximum system voltage	DC 600V					
Normal operating cell temperature	48.6℃					
Series fuse rating (A)	15 A					
Number of bypass diode	3					

PHYSICAL CHARACTERISTICS

Unit:mm (inch)



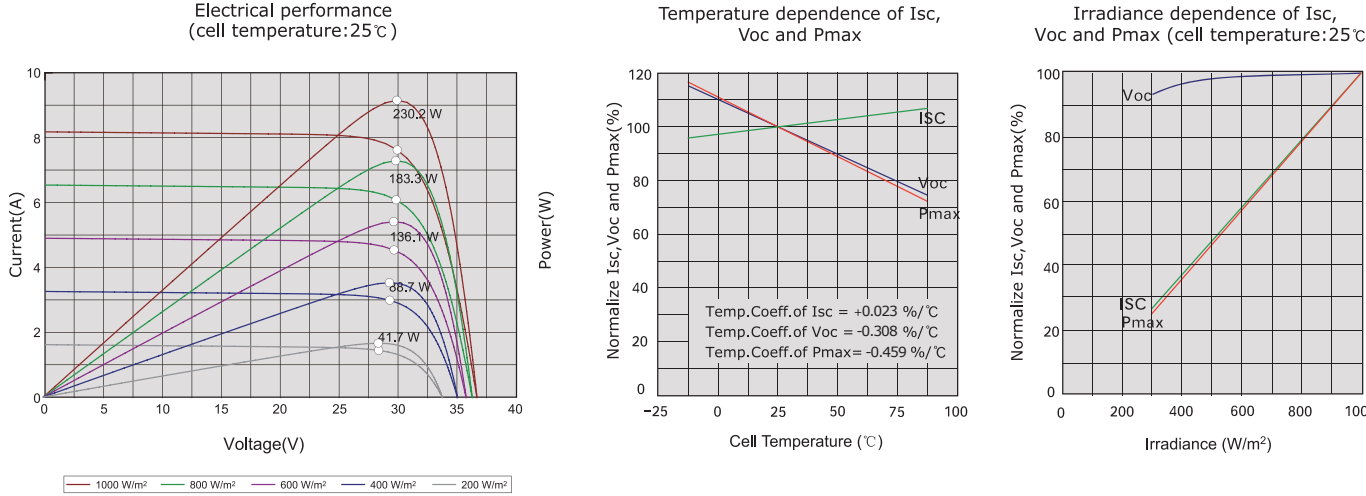
MECHANICAL SPECIFICATIONS

Cell type	156mm x 156mm
Number of cells	60 cells in series
Weight	19.32kg (42.59 lbs)
Dimensions	1640×992×40 mm (64.57×39.06×1.57 inch)
Max load	2160 Pascals (45lb/ft²)

TEMPERATURE COEFFICIENT

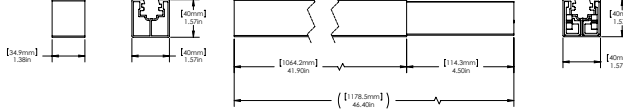
Temp. Coeff. of Isc (TK Isc)	0.023 %/℃
Temp. Coeff. of Voc (TK Voc)	-0.308 %/℃
Temp. Coeff. of Pmax (TK Pmax)	-0.459 %/℃

ELECTRICAL CHARACTERISTICS



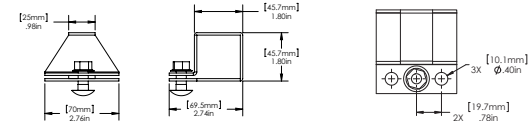
Components

Spanner Bar & Bar Sleeve



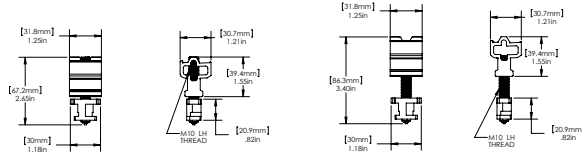
The Spanner Bar is a snap-together component that spans between and connects to tile hooks or flashed attachment hardware and provides attachment point flexibility in both nominal east-west and north-south axes. At the end of a run of Spanner Bars, the Bar Sleeve provides a point of attachment for the Cam Foot.

Spanner Clamp



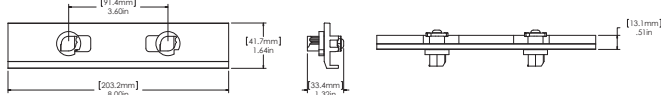
The Spanner Clamp provides a means of attachment between the Spanner Bar and the roof attachment hardware.

Cam Foot



The Cam Foot creates a structural connection between the Spanner Bars and the module frame and allows for precision height adjustability.

Interlock



The Interlock provides north-south and east-west structural and ground bond connections creating a structurally contiguous hyper-bonded array. ETL Listed to UL1703

Note: The specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m² solar irradiance, 1.5 Air Mass, and cell temperature of 25 °C. The NOCT is obtained under the Test Conditions : 800 W/m², 20°C ambient temperature, 1 m/s wind speed, AM 1.5 spectrum. Please contact support@etsolar.com for technical support. The parameters may be changed without notice due to product improvement.