

We Make Solar Evolve

# ELITE MONO

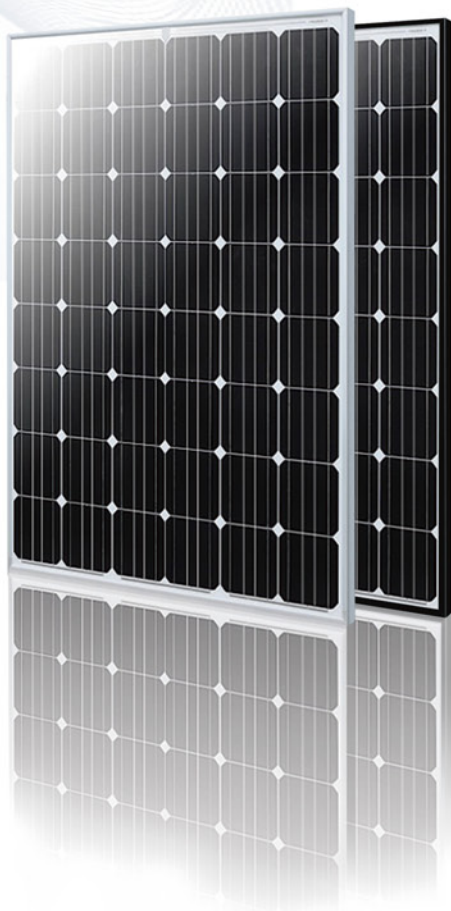
## Monocrystalline Module

ET-M648235WW/WB 235W

ET-M648230WW/WB 230W

ET-M648225WW/WB 225W

ET-M648220WW/WB 220W



Rich Product Portfolio & Innovative Product Strategy, satisfy customer needs to the best, and keep the customers' overall costs to the lowest.



### High Conversion Efficiency

Industry-leading processing techniques realize great module efficiency to a maximum of 17.89%, steady power output guaranteed.



### Anti-reflective Coating and Reduce O&M Costs

Easier to clean by rainwater to remove dirt on the glass surface, making higher power output and lower maintenance costs.



### 0 to +5W Positive Tolerance

Gain more power yields than expected.



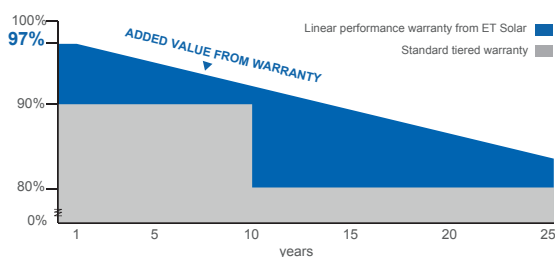
### Excellent Loading Capability

2400Pa wind loads, 5400Pa snow loads.  
Durable and long-lasting.



### Top-quality & Trustworthy Product

Rigorous Quality Management System built.  
Multiple internationally recognized PV industry standard certifications attained.



25 25-year performance warranty

10 10-year warranty on materials and workmanship

IEC 61215 Ed.2  
IEC 61730  
IEC 61701  
IEC 62716



**ET** Solar

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

M/ET-PD-EN-AP2017V3

## ELECTRICAL SPECIFICATIONS

Model Type	ET-M648235WW	ET-M648230WW	ET-M648225WW	ET-M648220WW
	ET-M648235WB	ET-M648230WB	ET-M648225WB	ET-M648220WB
Peak Power (Pmax)	235W	230W	225W	220W
Module Efficiency	17.89%	17.51%	17.13%	16.75%
Maximum Power Voltage (Vmp)	25.77V	25.33V	25.29V	25.21V
Maximum Power Current (Imp)	9.12A	9.09A	8.9A	8.73A
Open Circuit Voltage (Voc)	31.82V	31.74V	31.41V	31.26V
Short Circuit Current (Isc)	9.65A	9.59A	9.23A	9.14A
Power Tolerance	0 to +5W			
Operating Temperature	- 40 ~ + 85°C			
Maximum System Voltage	DC 1000V			
Nominal Operating Cell Temperature	45±2°C			
Fire Safety	Class C			
Maximum Series Fuse Rating	20A			

## MECHANICAL SPECIFICATIONS

Cell Type	156.75mm x 156.75mm
Number of Cells	48 cells in series
Weight	15 kg (33.07 lbs)
Dimension	1324×992×35mm (52.13×39.06×1.38 inch)
Max Load	5400 Pascals (112 lb/ft <sup>2</sup> )
Junction Box	≥IP67 rated
Connector	TLCABLE01 Or QC4.10 Or PV-KST4/xy, PV-KBT4/xy
EN50521	Or PV-CF-S 2,5-6(+)/ PV-CM-S 2,5-6(-)

## TEMPERATURE COEFFICIENT

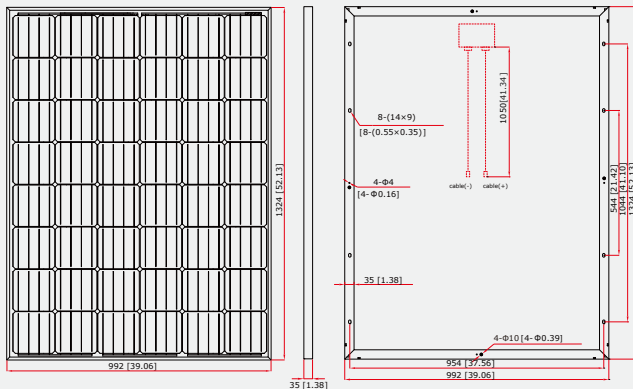
Temp. Coeff. of Isc (TK Isc)	0.05% /°C
Temp. Coeff. of Voc (TK Voc)	-0.30% /°C
Temp. Coeff. of Pmax (TK Pmax)	-0.42% /°C

## PACKING MANNER

Container	20' GP	40' GP
Pieces per Pallet	30	30
Pieces per Container	480	960

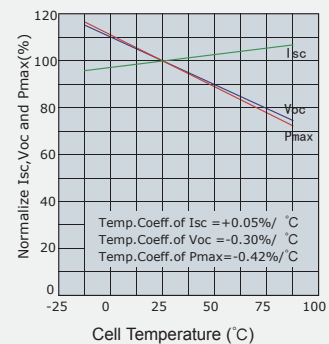
## PHYSICAL CHARACTERISTICS

Unit:mm (inch)

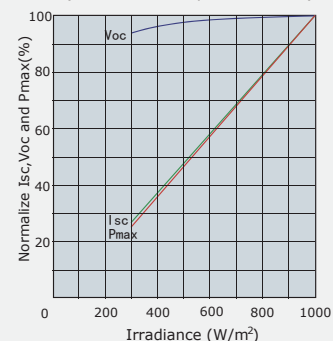


## ELECTRICAL CHARACTERISTICS

### Temperature Dependence of Isc, Voc and Pmax



### Irradiance Dependence of Isc, Voc and Pmax (AM1.5, Cell Temperature 25°C)



**Note:** the specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m<sup>2</sup> solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m<sup>2</sup>, 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum.

Please contact [support@etsolar.com](mailto:support@etsolar.com) for technical support. The actual transactions will be subject to the contracts. This parameters is for reference only and it is not a part of the contracts. The specifications are subject to change without prior notice.

The connectors listed in the datasheets are for reference only and it is not a part of the contract. The connector we use for the customer's order is not limited to the types listed in the datasheet, which is subject to change without prior notice. The installers need to use the same connector type to PV system.