

25-year performance warranty

IEC 61215 Ed.2 IEC 61730 IEC 61701

IEC 62716

UL 1703

10-year warranty on materials and workmanship

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.



M/ET-PD-EN-EU2017V2

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℃				
Fire Safety	Class C				
Maximum Series Fuse Rating	20A				

MECHANICAL SPE	CIFICATIONS
Cell Type	156.75mm x 156.7

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	MC4 Compatible		
Output cable	PV 1-F 4mm <sup>2</sup>		

### PHYSICAL CHARACTERISTICS

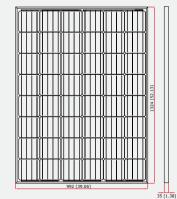
Unit:mm (inch)

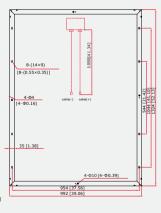
TEMPERATURE COEFFICIENT		
Temp. Coeff. of Isc (TK Isc)	0.05% /°C	
Temp. Coeff. of Voc (TK Voc)	-0.30% /°C	
Temp. Coeff. of Pmax (TK Pmax)	-0.42% /°C	

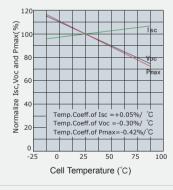
PACKING MANNER				
Container	20' GP	40' GP		
Pieces per Pallet	30	30		
Pieces per Container	480	960		

## ELECTRICAL CHARACTERISTICS

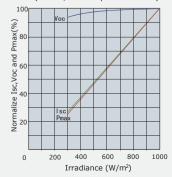
### Temperature Dependence of Isc, Voc and Pmax







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



Note: the specifications are obtained under the Standard Test Conditons (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 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.