ET Solar

Passion for Green

ET BLACK MODULE polycrystalline

ET-P660240B	240W
ET-P660235B	235W
ET-P660230B	230W
ET-P660225B	225W
ET-P660220B	220W

Features

- Aesthetically appealing for residential and commercial systems with black backsheet and frame
- High module conversion efficiency, through superior manufacturing technology
- Guaranteed -1% to +3% Power Tolerance
- Entire module certificated to withstand high wind loads and snow loads (5400Pa)
- Anodized aluminum is mainly for improving corrosion resistance.
- Highly transparent, low-iron, tempered glass, and antireflective coating
- Excellent performance under low light environments

Benefits

- 25-year warranty on power output; 5-year warranty on materials and workmanship
- Product liability insurance
- Local technical support
- Local warehousing
- 48 hour-response service
- Enhanced design for easy installation and long term reliability

JOHNSON POWERS LLC

IEC 61215 Ed.2
IEC 61730

Intertek 4000322

CONFORMS TO ANSI/UL STD 1703
CERTIFIED TO ULC/CSA STD ORDC1703

www.johnsonpowers.com

ELECTRICAL SPECIFICATIONS

Model type	ET-P660240B	ET-P660235B	ET-P660230B	ET-P660225B	ET-P660220B
Peak power (Pmax)	240W	235W	230W	225W	220W
Cell Efficiency	16.94%	16.59%	16.24%	15.89%	15.50%
Module Efficiency	14.75%	14.44%	14.14%	13.83%	13.52%
Maximum power voltage (Vmp)	29.40V	29.40V	29.40V	29.00V	29.00V
Maximum power current (Imp)	8.16A	7.99A	7.82A	7.75A	7.58A
Open circuit voltage (Voc)	36.50V	36.50V	36.50V	36.30V	36.30V
Short circuit current (Isc)	8.50A	8.30A	8.30A	8.10A	8.10A
Power Tolerance	-1 to +3%				
Maximum system voltage	DC 1000V (VDE) / DC 600V (UL)				
Normal Operating Cell Temperature	45.3±2℃				
Series fuse rating (A)	15A				
Number of bypass diode	3				

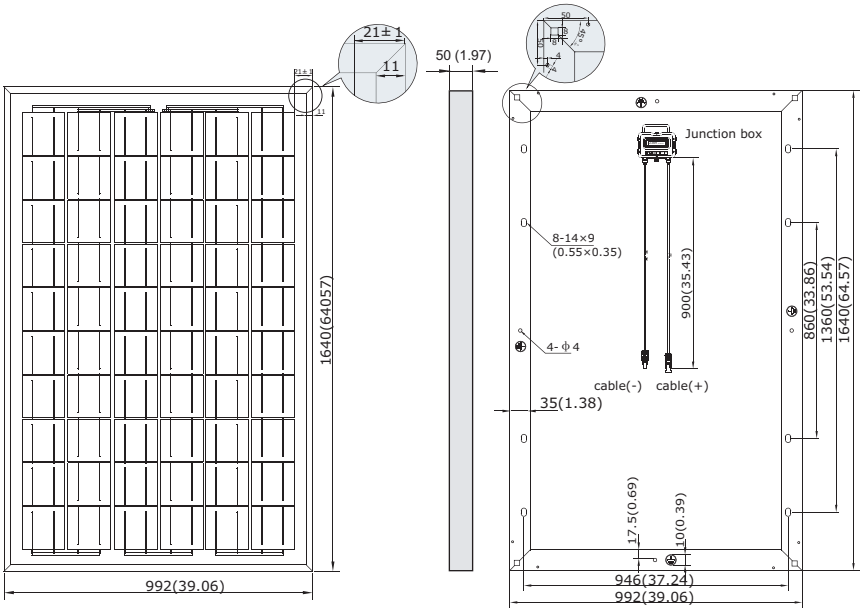
MECHANICAL SPECIFICATIONS

Cell type	156mm x 156mm
Number of cells	60 cells in series
Weight	19.93 kg (43.94 lbs)
Dimensions	1640×992×50 mm (64.57×39.06×1.97 inch)
Max Load	5400Pascals (112 lb/ft²)

TEMPERATURE COEFFICIENT

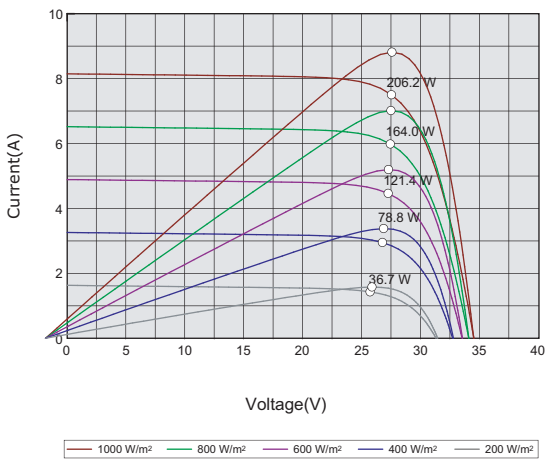
Temp. Coeff. of Isc (TK Isc)	0.065 %/℃
Temp. Coeff. of Voc (TK Voc)	-0.346 %/℃
Temp. Coeff. of Pmax (TK Pmax)	-0.46 %/℃

PHYSICAL CHARACTERISTICS Unit:mm (inch)

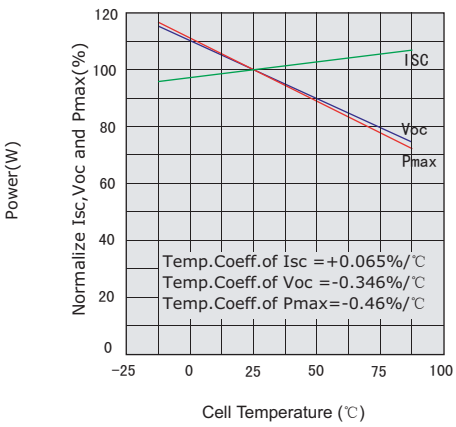


ELECTRICAL CHARACTERISTICS

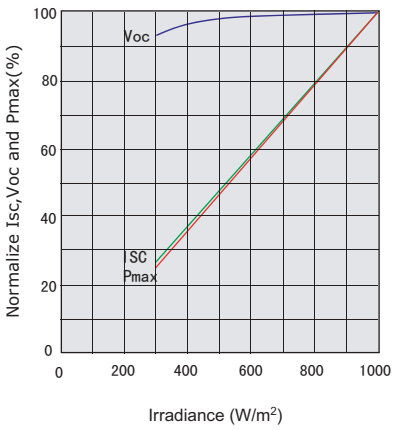
Electrical performance (cell temperature:25℃)



Temperature dependence of Isc, Voc and Pmax



Irradiance dependence of Isc, Voc and Pmax (cell temperature:25℃)



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℃.
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.