

Photovoltaic Polycrystalline SMP - 165



High efficiency Multicrystalline solar panel

Electrical Specification

Peak Power (Wp)	165
Tolerance (Power allowance range)	-0.05
Rated voltage (Voc)	22.5v
Rated current (Imp)	7.33A
Open Circuit Voltage (Voc)	28.6V
Short Circuit Current (Isc)	7.94A
Max. System voltage (v)	1000
Cell efficiency	>15%
Module efficiency	>13.5%

Standard test conditions

These values are effective for irradiation of 1000w/m², AM1.5, and a cell temperature of 25°C.

Operating Conditions

Temperature range	-40°C to 80°C
Hail	Maximum diameter of 28mm with impact speed of 86km/h

Mechanical Data

Length mm	1593
Width mm	790
Height mm	40
Weight kg	16.3
Junction box	3 bypass diodes
Cable Solar	900mm length prefabricated with MC plug
Front glass	Low-iron high transparency temper glass 3.2mm
Cell	156 x156mm polycrystalline silicon
Cell encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back	TPT
Frame	Anodized aluminium profile

Carbon Energy Solutions Multicrystalline photovoltaic module is designed to provide superior value and performance for residential, commercial and industrial use.

With time-tested silicon solar cells, the photovoltaic module provides cost-effective power for DC loads or, with an inverter, AC loads. Manufactured with 72 enhanced-efficiency cells in series, it charges 24V batteries (or multiples of 24V) efficiently in virtually any climate.

With 165 watts of nominal maximum power the photovoltaic module is used in utility-grid supplemental systems for residences, commercial buildings, and centralised power generation. In addition the photovoltaic module can be used for remote systems for applications including telecommunications, pumping and irrigation, isolated villages and homes, and land-based navigation aids.

NB: Due to continuous development specifications are subject to change