

Electrical Characteristics

TW230P60 Series

Polycrystalline Silicon PV Module

Parameter \ Type	TW210P60	TW215P60	TW220P60	TW225P60	TW230P60	TW235P60	TW240P60
Maximum Power (P max)	210 W	215 W	220 W	225 W	230 W	235 W	240 W
Voltage at Pmax (V mpp)	28.4V	28.7V	28.9V	29.2V	29.4V	29.8V	30.0V
Current at Pmax (I mpp)	7.40A	7.50A	7.62A	7.71A	7.82A	7.89A	8.00A
Short circuit current (Isc)	8.00A	8.11A	8.20A	8.20A	8.22A	8.29A	8.38A
Open circuit voltage (Voc)	36.1V	36.4V	36.7V	36.8V	37.3V	37.6V	37.6V
Maximum System Voltage	DC 1000V (TUV) ; DC 600V (UL)						
Power Tolerance	± 3%						
Series Fuse Rating	15 A						

- All technical data at standard test condition:
Am=1.5 E=1000W/m² Tc=25°C

Mechanical Characteristics

Dimensions	Length: 1640 mm Width: 992 mm Depth: 40 mm
Weight	20 kg
Solar Cells	60 solar cells (156mm x 156mm) in a 6x10 matrix connected string
Junction Box	IP 65 Junction Box
Output Cables	4 mm ² (12AWG) solar cable with weatherproof connertors
Front Cover	3.2 mm (1/8 inch) low iron, high transparent tempered glass
Frame	Material: 6063T5; Electrophoretic coating aluminum alloy frame; Color: silver

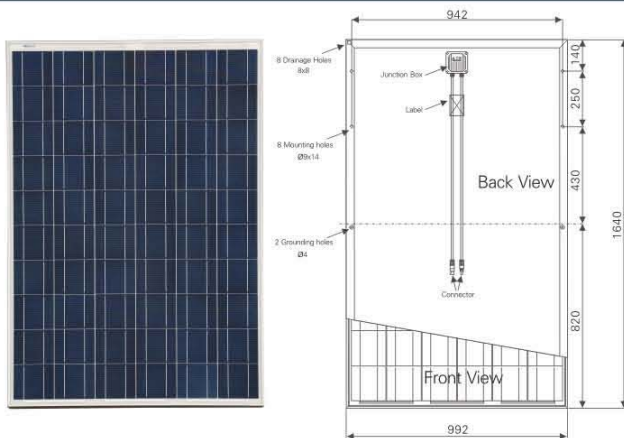
Temperature Coefficients

Nominal Operating Cell Temperature (NOCT)	47 ± 2°C
Temperature Coefficient of Pmax	-0.44 %/°C
Temperature Coefficient of Voc	-0.34 %/°C
Temperature Coefficient of Isc	0.06 %/°C

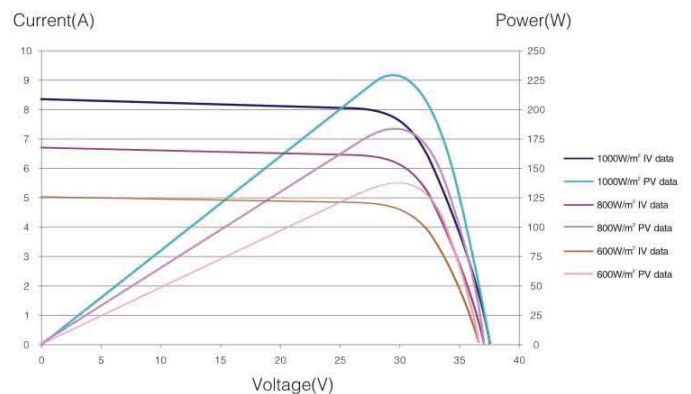
Qualification Test Parameters

Operating Temperature	-40 °C to +85 °C
Wind Load	≤ 2400 Pa
Snow Load	≤ 5400 Pa

Module Diagram



TW230P60 Module IV Curves



Note: Technical data is subject to change without prior notice, please contact Tianwei New Energy representative for latest data.

Electrical Characteristics

TW230(28)P Series

Polycrystalline Silicon PV Module

Parameter	Type	TW210(28)P	TW215(28)P	TW220(28)P	TW225(28)P	TW230(28)P	TW235(28)P	TW240(28)P
Maximum Power (P max)		210 W	215 W	220 W	225 W	230 W	235 W	240 W
Voltage at Pmax (V mpp)		28.5 V	28.7 V	29 V	29.3 V	29.7 V	30.1 V	30.3 V
Current at Pmax (I mpp)		7.37 A	7.49 A	7.59 A	7.68 A	7.74 A	7.81 A	7.92 A
Short circuit current (Isc)		8.13 A	8.30 A	8.47 A	8.60 A	8.72 A	8.86 A	8.88 A
Open circuit voltage (Voc)		36.4 V	36.5 V	36.6 V	36.7 V	36.7 V	36.7 V	37.1 V
Maximum System Voltage		DC 1000V (TUV) ; DC 600V (UL)						
Power Tolerance		± 3%						
Series Fuse Rating		15 A						

- All technical data at standard test condition:
Am=1.5 E=1000W/m² Tc=25°C

Mechanical Characteristics

Dimensions	Length: 1653mm Width: 995mm Depth: 45mm
Weight	20 kg
Solar Cells	60 solar cells (156mm x 156mm) in a 6x10 matrix connected string
Junction Box	IP 65 Junction Box
Output Cables	4 mm ² (12AWG) solar cable with weatherproof connertors
Front Cover	3.2 mm (1/8 inch) low iron, high transparent tempered glass
Frame	Material: 6063T5; Electrophoretic coating aluminum alloy frame; Color: silver

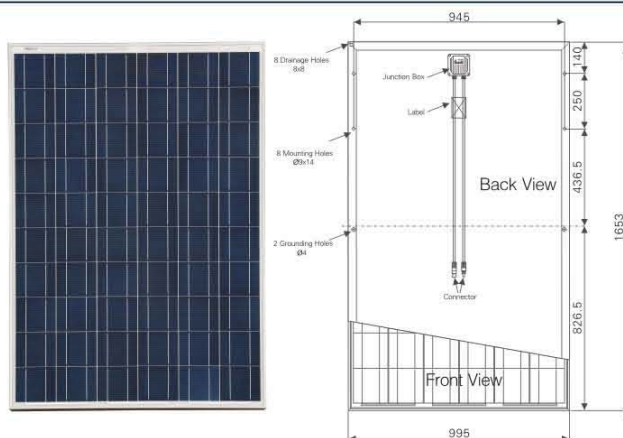
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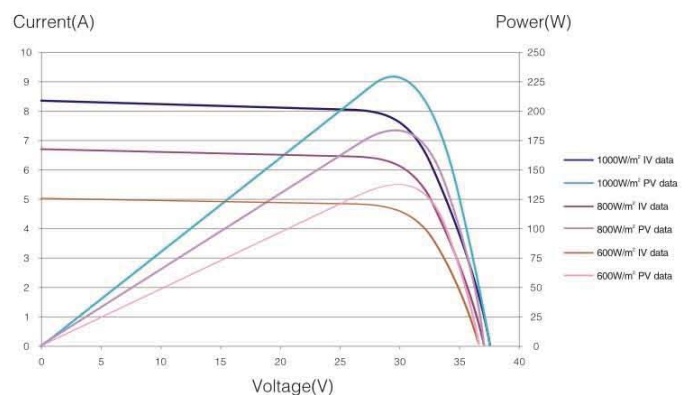
Qualification Test Parameters

Operating Temperature	-40 °C to +85 °C
Wind Load	≤ 2400 Pa
Snow Load	≤ 5400 Pa

Module Diagram



TW230(28)P Module IV Curves



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