www.twnesolar.com

50+25

History + Quality assurance

Tianwei, a company with over 50 years history, has well established a fully integrated PV industrial chain (silicon-wafer-cell-module). Utilizing first-class materials and advanced processes, plus stringent QA practice, Tianwei is committed to provide you:

- **High-performance modules with excellent efficiency**
- **Long lasting product quality and reliable power output guarantee**
  - Free from defects in materials and workmanship for 5 years
  - 90% power output over 10 years
  - 80% power output over 25 years

TIANWEI

TW230P60 Series

Polycrystalline Silicon PV Module

Electrical Characteristics

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)	28.5 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)	8.1 A	8.27 A	8.45 A	8.6 A	8.72 A	8.86 A	8.88 A
Open circuit voltage (Voc)	36.44 V	36.5 V	36.6 V	36.65 V	36.7 V	36.74 V	37.1 V
Maximum System Voltage	DC 1000V (TUV) ; DC 600V (UL)						
Power Tolerance	± 3%						
Series Fuse Rating	15 A						
NOCT	47 ± 2 ℃						

■ The electrical data apply to standard test conditions (STC):
Irradiance at the module level of 1000 w/m² with spectrum AM 1.5 and a cell temperature of 25 ℃.

Mechanical Characteristics

Dimensions	Length: 1653 mm Width: 995 mm Depth: 45 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 mm² solar cable with weatherproof connectors
Front Cover	3.2 mm (1/8 inch) low iron, high transparent tempered glass
Frame	Clear anodized aluminum alloy frame; Color: silver

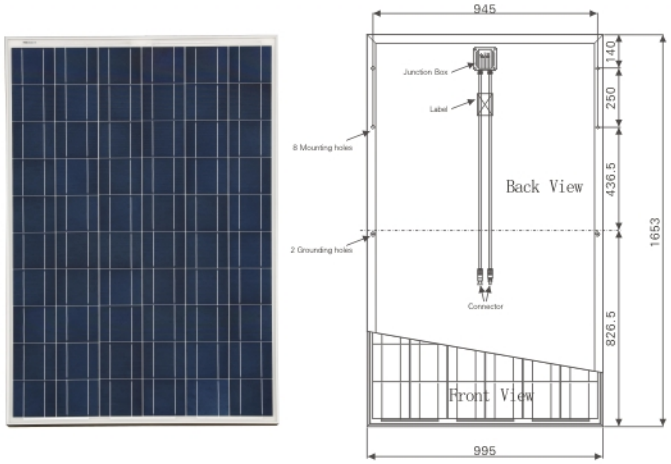
Temperature Coefficients

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

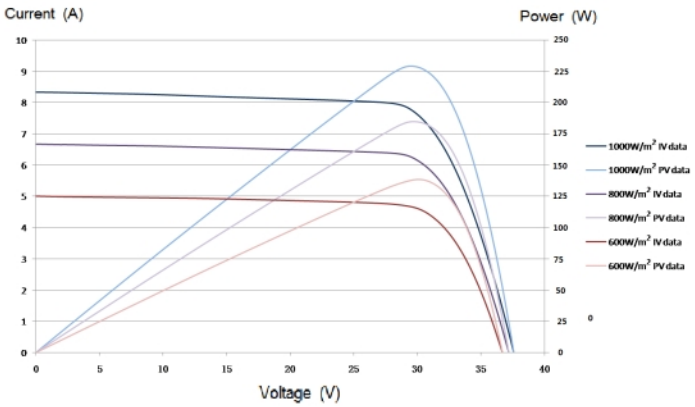
Qualification Test Parameters

Operating Temperature	−40 ℃ to +85 ℃
Wind Impact	⩽ 2400 Pa
Snow Impact	⩽ 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.