

YUNNAN TIANDA

PHOTOVOLTAIC CO., LTD.



240W/235W/230W

225W/220W/215W

Polycrystalline Silicon Solar Module

HIGH STABILITY HIGH RELIABILITY LOW DEGRADATION

Over 30 years' technology R&D of solar cell and module.

1640×992×40mm design with 4 mm high transmission and tempered glass is suitable for the resisting of heavy snow load, hailstone, typhoon, and other extreme weather conditions

Module conversion efficiency is up to 14.8%, minimizing installation costs and maximizing the output of your system.

Our 60 cells solar module is designed for both ground and roof application, especially for large roof.



Quality and Safety

25 years limited warranty

ISO9001 & ISO14001 certified factories

IEC61215:2005(2nd Ed.) certification from TUV Rheinland Germany

IEC61730:2004 certification from TUV Rheinland Germany

Warranty

Free from defects in materials and workmanship for 5 years

10 years on 90% of the minimum power output

25 years on 80% of the minimum power output



IEC 61215
IEC 61730
certified



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TIANDA

Typical Electronic Characteristics

Characteristics	TD240P6	TD235P6	TD230P6	TD225P6	TD220P6	TD215P6
Rated output Pm(W)	240	235	230	225	220	215
Open circuit voltage Voc (V)	37.3	37	37	36.50	36.50	36.0
Short circuit current Isc (A)	8.6	8.54	8.4	8.28	8.15	8.10
MPP voltage Vmpp (V)	29.6	29.5	29.5	29.50	29.00	29.00
MPP current Impp (A)	8.11	7.97	7.8	7.63	7.59	7.41
Module efficiency (%)	14.8	14.4	14.1	13.8	13.5	13.2
Filling factor FF (%)	74.8	74.4	74	74.5	74.0	73.7
Max. system voltage (V)	1000	1000	1000	1000	1000	1000
Operating temperature (°C)	-40 — +85					
Max. series fuse rating (A)	16					
Power tolerance (V)	± 3*					

Tested under STC (Standard Testing Conditions: Irradiation 1000W/m², Spectrum AM1.5, Cell temperature: 25 °C)

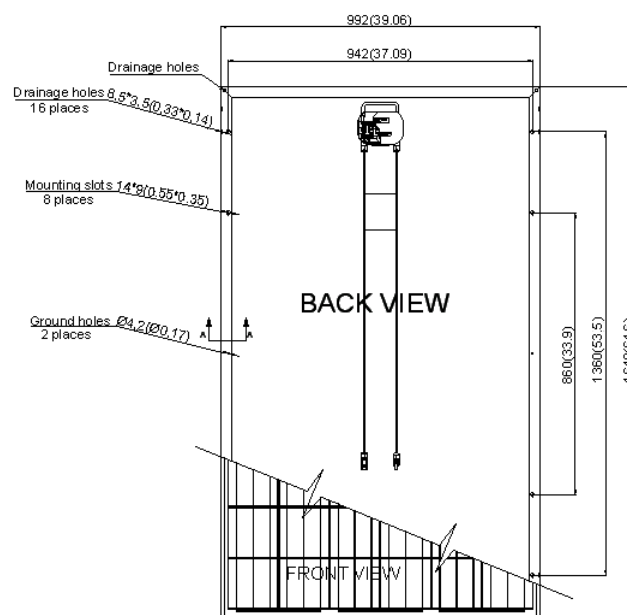
*: Tolerance can be adjusted according to requirements of customers.

Temperature Coefficient

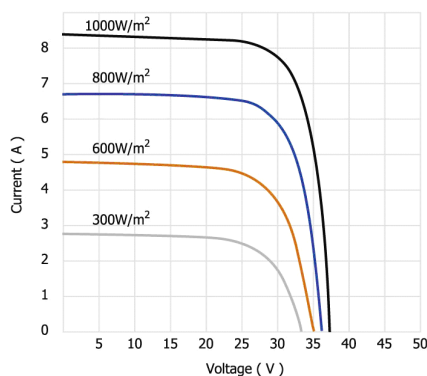
NOCT	44±2 °C
γT (Pmpp)	-0.3583 %/K
βT (Voc)	-0.2612 %/K
αT (Isc)	0.0585 %/K

Mechanical Characteristics

Module total dimension (L×W×T)	1640×992×40mm
Frame	Clear anodized aluminum alloy type 6063T5. Silver Universal Frame
Solar cell	60 cells (156×156mm) configured geometrically for a 6×10 matrix connected in series.
Junction box	IP65 rated
Output cables	4.0 mm ² 12AWG cable with weatherproof connectors. Cable lengths 1000mm (39.37inch).
Diodes	3 Schottky bypass diodes -one for every 20 cells -
Construction	Front: High transmission 3.2 mm tempered glass Rear: White polyester; encapsulant: EVA
Weight	19kgs



IV CURVE (Different radiation)



IV CURVE (Different temperature)

