

THINK-180

HIGH EFFICIENCY MONOCRYSTALLINE
PHOTOVOLTAIC MODULE



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Product Features

- High conversion efficiency based on leading innovative photovoltaic technologies.
- High reliability with guaranteed -3% to +5% power output tolerance, ensuring return on investment
- Attractive appearance
- Withstands high wind pressure and snow load, and extreme temperature variations
- Easy to install

Quality and Safety

- 10 years limited warranty of 90% power output, 25 year limited warranty of 80% power output, 60 months limited product warranty
- Rigorous quality control meeting the highest international standards
- ISO 9001:2000 (Quality Management System) certified factories manufacturing world class products
- IEC61215, Safety class II, conformity to CE
- IEC61730
- UL1703

Recommended Applications

- Residential rooftop systems
- On-grid utility systems
- On-grid commercial systems
- Off-grid PV systems
- Others



THINK's technology yield improvements to cells texturing, BSF structure and anti-reflective coatings to increase conversion efficiency



Unique design on drainage holes and rigid construction prevents frame from deforming or breaking due to freezing weather and other forces



The module provides more field power output through an advanced THINK solar glass, which transparency can reach 92%



The improved gloss of the Tedlar surface effects a special reflection to the solar radiation to increase conversion efficiency and resist weather and moisture

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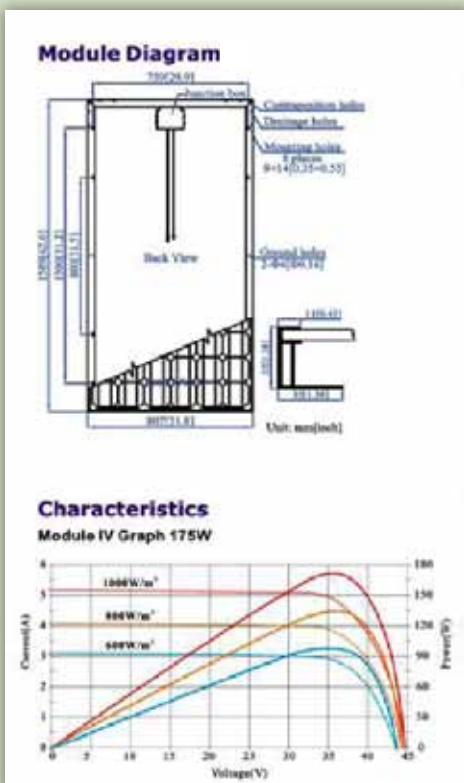
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Electrical Characteristics

Characteristics	THINK150,155,160,165,170,175,180 / 1589 X 807						
Maximum power (Pmax)	150Wp	155Wp	160Wp	165Wp	170Wp	175Wp	180Wp
Voltage at Pmax (Vmp)	35.0V	35.2V	35.4V	35.6V	35.9V	36.2V	36.5V
Current at Pmax (Imp)	4.29A	4.40A	4.52A	4.63A	4.74A	4.83A	4.93A
Open-Circuit Voltage (Voc)	42.6V	42.8V	43.0V	43.2V	43.5V	43.8V	44.2V
Short-Circuit Current (Isc)	4.88A	4.96A	5.05A	5.12A	5.20A	5.28A	5.35A
Maximum System Voltage	IEC, UL 1000V DC, 600V						
Maximum Series Fuse Rating	8A						
NOCT	45+-2%/°C						
Power Tolerance	-3% to +5%						



Mechanical Characteristics

Solar Cell	Mono-crystalline 125 X 125mm
No. of Cells	72 (6X12)
Dimensions	1589X807X35mm
Weight	15kg
Construction	Front side: High transmission 3.2mm tempered glass Back side: Tedlar, white Encapsulation :EVA
Junction Box	IP 65 Rated
Output-Cables	NANYANG 4.0mm ² , lengths (+-) 900mm, Quick connectors IP 65 rated
Frame	Clear anodized aluminum alloy type 6063T6 frame; Color: Silver

Qualification Test Parameters

Temperature	-40°C to +85°C
Max Load	50psf (2400 pascals)
Hailstone impact	25mm (1 inch) at 23m/s (52mph)

Temperature Coefficients

Temperature Coefficient of Pmax	-0.48% / °C
Temperature Coefficient of Voc	-0.34% / °C
Temperature Coefficient of Isc	0.017% / °C