



AS-DGF2

80W~100W

THIN FILM MODULE



ADVANCED PERFORMANCE & PROVEN ADVANTAGES

● EXCELLENT POWER GENERATION PERFORMANCE

CdTe thin film modules have a high efficiency and a proven excellent record on power generation performance. Comparing to crystalline silicon solar modules, CdTe thin film module generates up to 8% more energy per watt.

● EXCELLENT LOW-IRRADIANCE EFFECT

CdTe is a direct gap material, which has better absorption of the full spectrum. Under low light condition, in dawn, dusk of a day or in a diffuse lighting, the power generation performance of CdTe thin film modules has been proven to be higher than that of crystalline silicon solar modules.

● LOW HOT SPOT EFFECT

The elongated sub-cells of CdTe solar cells help reduce the hot spot effect, and have great advantages in improving power generation capacity, ensuring product life and safety.

● GOOD STABILITY

Unlike crystalline silicon modules, CdTe thin film technology does not experience the losses associated with LID and LeTID.

● EXCELLENT APPEARANCE

CdTe modules have uniformity color-pure black which provides an excellent appearance, fit best in buildings that have higher standards on appearance, unity and energy-independence.



Passionately

committed to

delivering innovative

energy solution

CERTIFICATIONS

- IEC 61215, IEC 61730, CE
- ISO 9001:2015: Quality management system
- ISO 14001:2015: Environmental management system
- ISO 45001:2018: Occupational health and safety management system

SPECIAL WARRANTY

- 20 years product warranty
- 30 years linear power output warranty

ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (P_{max})	80W	85W	90W	95W	100W
Open Circuit Voltage (V_{oc})	58.8V	60.2V	61.2V	62.2V	63.2V
Short Circuit Current (I_{sc})	1.90A	1.97A	2.08A	2.19A	2.30A
Voltage at Maximum Power (V_{mp})	48.0V	48.3V	48.5V	48.7V	48.9V
Current at Maximum Power (I_{mp})	1.67A	1.76A	1.86A	1.96A	2.05A
Module Efficiency (%)	11.11	11.81	12.50	13.19	13.89
Operating Temperature	-40°C to +85°C				
Maximum System Voltage	1000V DC/1500V DC				
Fire Resistance Rating	Class C				
Maximum Series Fuse Rating	3.5A				

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5; Tolerance of Pmax: 0~+3%; Measurement Tolerance: ±3%

ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (P_{max})	60W	64W	68W	72W	76W
Open Circuit Voltage (V_{oc})	55.5V	56.8V	57.8V	58.7V	59.7V
Short Circuit Current (I_{sc})	1.54A	1.60A	1.68A	1.77A	1.86A
Voltage at Maximum Power (V_{mp})	44.9V	45.2V	45.4V	45.6V	45.8V
Current at Maximum Power (I_{mp})	1.34A	1.42A	1.50A	1.58A	1.66A

NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1 m/s

MECHANICAL CHARACTERISTICS

Cell type	Cadmium Telluride(CdTe)
Module dimensions	1200x600x6.8mm
Weight	12kg
Front glass	3.2mm Annealed glass
Back glass	3.2mm Annealed glass
Encapsulation	EVA+Edge sealing
Junction box	IP67
Cable	2.5mm ² , 580mm
Connector	MC4

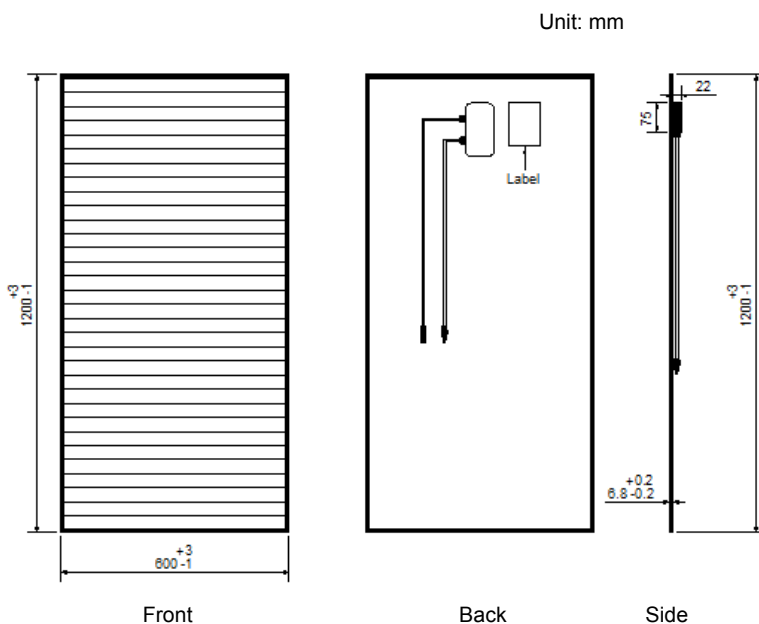
TEMPERATURE CHARACTERISTICS

Operating Temperature Range	-40°C~+85°C
Temperature Coefficients of P_{max}	-0.21%/°C
Temperature Coefficients of V_{oc}	-0.32%/°C
Temperature Coefficients of I_{sc}	0.06%/°C

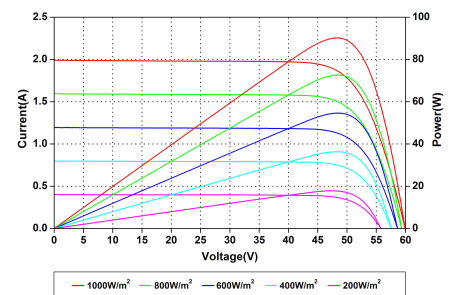
PACKAGING

Standard packaging	54pcs/pallet
Module quantity per 40' container	1944pcs
Pallet dimensions	1260x1080x790mm

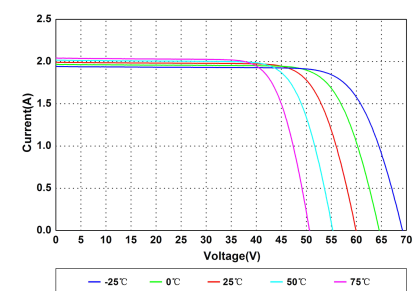
ENGINEERING DRAWINGS



IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.