

# MONOCRYSTALLINE SOLAR MODULE

## 270~280 Watt



### THE BEST IN CLASS

Based on the core concept of creating value for society, customers and enterprises, we will become the leading supplier of photovoltaic products.

### PRODUCT | KEY FEATURES



Excellent module efficiency up to 17.2%



Positive tolerance of up to 5% delivers higher outputs reliability



Excellent weak light performance  
Excellent performance under low light conditions



Current sorting process  
System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage



IP67 junction box available long-term weather endurance

### PRODUCT | WARRANTY & INSURANCE



- 97% in the first year, for years 2 through 25 years, 0.7% maximum decrease from module's nominal power output per year . To ensure no less than 80% after 25 years .
- 10- year material and workmanship warranty

### PRODUCT & MANAGEMENT SYSTEM | CERTIFICATES

#### CERTIFICATIONS & STANDARD

IEC 61215/IEC61730: CE/TUV/JET

ISO9001:2008 | QUALITY MANAGEMENT SYSTEM

ISO14001:2004 | STANDARD FOR ENVIRONMENTAL MANAGEMENT SYSTEM

BS OHSAS 18001:2007



### ABOUT FENGYUAN

ZhenJiang Fengyuan New Energy Technology Co.,Ltd ,established in June 26 2016, located in No.1 mingzhu south road, Youfang ,ZhenJiang ,Jiangsu Province,covers an area of 260 acres.

Now, we have 600 staff,mainly engaged in solar photovoltaic components manufacturing, sales and related technology research and development AS humans around the world advocate environmental protection,photovoltaic products will enter homes.We have achieved annual sales of 500MW moudules.

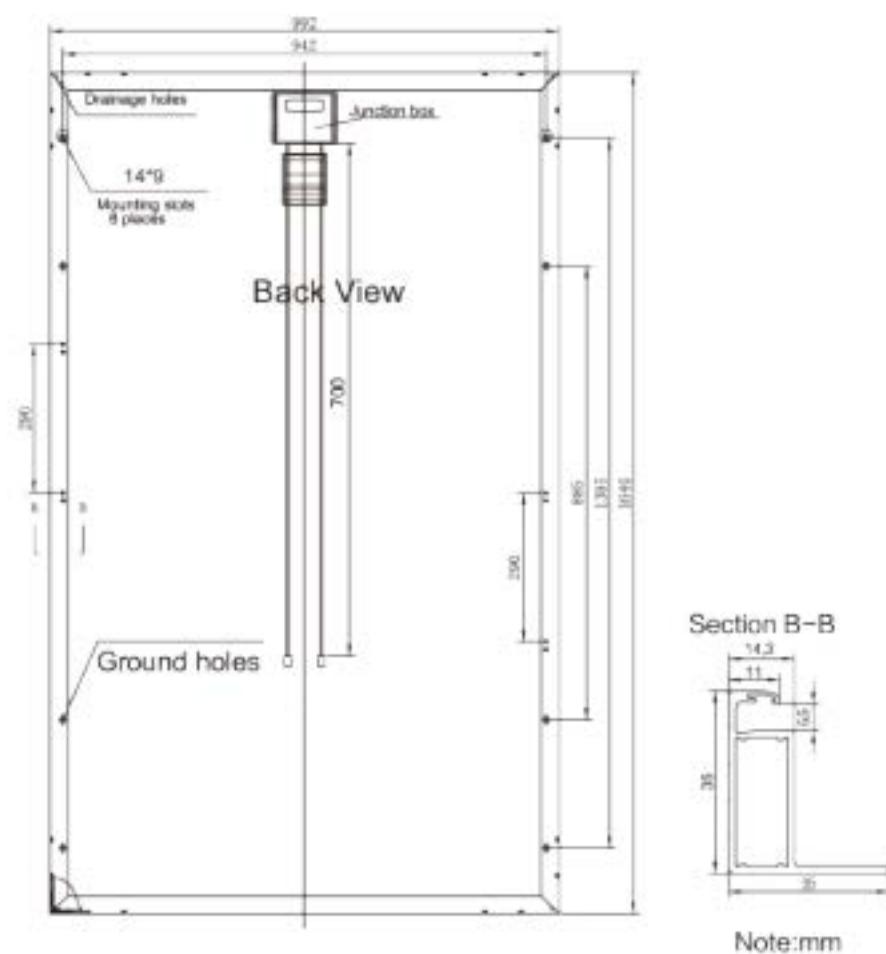
## ELECTRICAL DATA | STC

Electrical Data	FY270S-20/Wd	FY275S-20/Wd	FY280S-20/Wd
Maximum Power at STC (Pmax)	270W	275W	280W
Optimum Operating Voltage (Vmp)	32.3V	32.8V	33.3V
Optimum Operating Current (Imp)	8.36A	8.39A	8.41A
Open Circuit Voltage (Voc)	39.4V	40.0V	40.2V
Short Circuit Current (Isc)	8.89A	8.91A	8.93A
Module Efficiency	16.6%	16.9%	17.2%
Operating Module Temperature	-40 °C to +85 °C		
Maximum System Voltage	1000 V DC (IEC)		
Maximum Series Fuse Rating	20 A		
Power Tolerance	0/+5 %		

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5;

Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%

## MODULE | ENGINEERING DRAWING



Noct	FY270S-20/Wd	FY275S-20/Wd	FY280S-20/Wd
Maximum Power at NOCT (Pmax)	198W	201W	204W
Optimum Operating Voltage (Vmp)	28.5V	28.6V	28.7V
Optimum Operating Current (Imp)	6.94A	7.02A	7.10A
Open Circuit Voltage (Voc)	35.3V	35.5V	35.7V
Short Circuit Current (Isc)	7.36A	7.44A	7.53A

NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s;

Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/- 3%

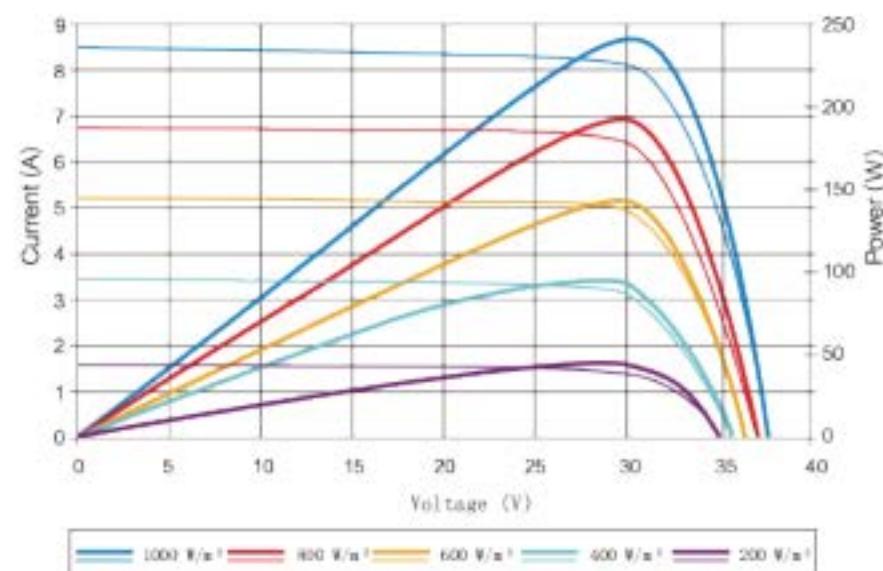
## Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.43 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.067 %/°C

## Mechanical Characteristics

Solar Cell	Monocrystalline silicon 156 × 156 mm
No. of Cells	60 (6 × 10)
Dimensions	1640 × 992 × 35mm
Weight	18.2 kg
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP67 rated (3 bypass diodes)
Output Cables	TUV (2 PFG 1169/08.07) 4.0 mm <sup>2</sup> , symmetrical lengths (-) 700 mm and (+) 700 mm
Connectors	TL connectors

## Current-Voltage & Power-Voltage Curve (245-20)



Excellent performance under weak light conditions: at an irradiation intensity of 200 W/m<sup>2</sup> (AM 1.5, 25 °C), 95.5% or higher of the STC efficiency (1000 W/m<sup>2</sup>) is achieved.