



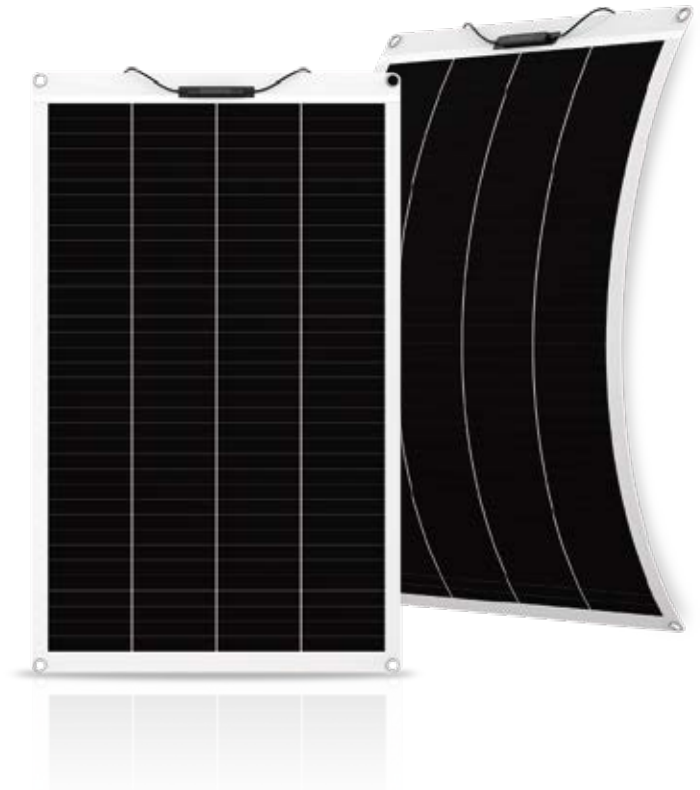
# 160WP FLEXIBLE SOLAR PANELS

## Introduction of shingled panel

- Shingled cell is connected by special conductive glue, face to face with zero distance connection. So it has better bending performance than a conventional panel connected by bus bar/This can enhance current transportation inside the panel. At the same time, micro crack affecting area is limited.

- The Cell is connected by ribbon, it will cover part of the solar cell. So reduce the sunlight absorption. The shingle solar cell is a back-contact solar cell, so the surface can completely collect the sunlight. The quantity of cells, shingle solar cell can produce more power.

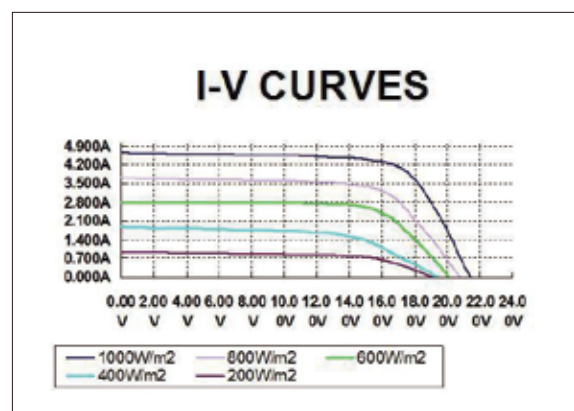
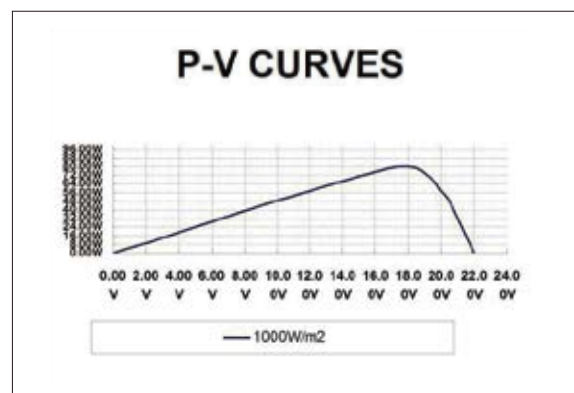
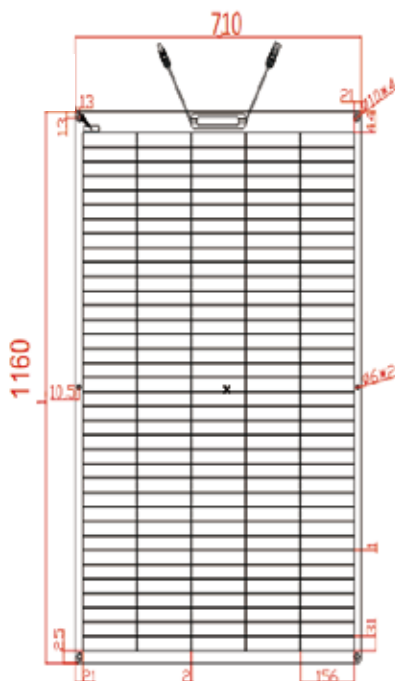
- Conventional panel connects in series, shingled panel is series & parallel connection. So shingled panel can reduce shading negative effects. The unique parallel design reduces the hot-spot effect significantly



## Warranty

25-year transferrable power output warranty:

- 1 years/95% ,3 years/90%, 10 years/85%, 20 years/80% Based on nominal power
- 1 years material and workmanship warranty





## ELECTRICAL CHARACTERISTICS

Model	FS-S160WP
Maximum Power at STC (Pmax)	160W
Optimum Operating Voltage (Vmp)	19.1V
Optimum Operating Current (Imp)	8.38A
Open - Circuit Voltage (Voc)	22.5V
Short - Circuit Current (Isc)	9.30A
Cell Efficiency	21.0% above
Operating Module Temperature	-20 °C to +65 °C
Maximum System Voltage	1000 V DC (IEC) / 600 V DC (UL)
Maximum Series Fuse Rating	20 A
Power Tolerance	±3 %

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

## MECHANICAL CHARACTERISTICS

Solar Cel	Shingled cell
Cells layout	5*36
Dimensions	1160*710*3mm
Weight	2.1Kg
Front Glass	ETFE or Polish PET
Frame	N/A
Junction Box	IP67 rated
Output Cables	TUV (2Pfg1169:2007), UL 4703, UL 44 Optional 4.0 mm <sup>2</sup> ,symmetrical lengths(-)1000mm and (+)1000mm
Connectors	SOLAR MC4 integrated twist locking connectors

## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	25±2°C
Temperature Coefficient of Pmax	-0.44 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.055 %/°C