



**17.3%**

Module efficiency

**3year**

Quality/Performance Warranty

# S-FLEX · 45-50W

## MWT Mono PERC Flexible Module



- ★ ISO 9001: 2015 Quality Management System
- ★ ISO 45001: 2018 Occupation Health Safety Management System
- ★ ISO 14001: 2015 Environment Management System

### Features

- Light, Thin design**  
0.79kg weight, match various requirements for low-load projects
- High Efficiency And Reliability**  
Busbar-free design increases cell conversion efficiency, more power output can be achieved at low irradiance conditions
- Customizable**  
Customized design for different scenarios
- Convenient Installation**  
Easy installation and convenient transportation with lower cost
- Ultra Flexible**  
Ultra-thin silicon wafers with advanced organic polymer encapsulation materials, minimum bending radius reach 0.30m, fit all kinds of curved surface perfectly
- Lead-free**  
Eco-friendly PV design achieves lead-free MWT module without soldering materials

### Electrical Characteristics at Standard Test Conditions(STC)

Spec/Model	Unit	SPP045QH18S	SPP050QH18S
Max-Power(Pm)	W	45	50
Power Tolerance	W	0~+5	
Max-Power Voltage(Vm)	V	10.0	10.2
Max-Power Current(I <sub>m</sub> )	A	4.5	4.91
Open-Circuit Voltage(Voc)	V	12.0	12.2
Short-Circuit Current(Isc)	A	4.78	5.22
Effective Module Efficiency(η <sub>m</sub> )	%	15.6	17.3

STC: AM=1.5, Irradiation 1000W/m<sup>2</sup>, Module Temperature 25°C

### Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SPP045QH18S	SPP050QH18S
Max-Power(Pm)	W	33	37
Max-Power Voltage(Vm)	V	9.2	9.4
Max-Power Current(I <sub>m</sub> )	A	3.59	3.94
Open-Circuit Voltage(Voc)	V	11.2	11.4
Short-Circuit Current(Isc)	A	3.81	4.22

NMOT: Irradiation 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1m/s

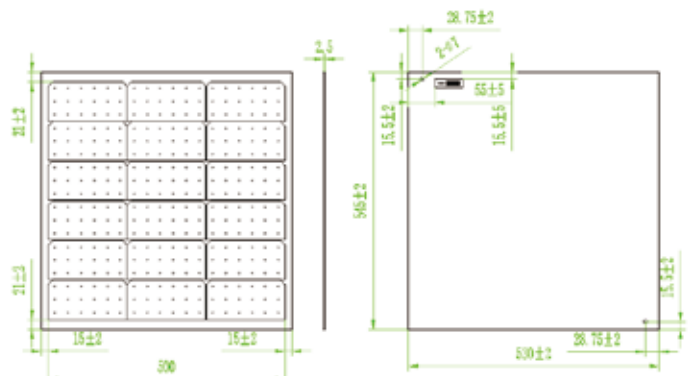
### Temperature Coefficient

Nominal Module Operating Temperature	43±2°C
Temperature coefficient of P <sub>max</sub>	-0.36%/°C
Temperature coefficient of V <sub>oc</sub>	-0.28%/°C
Temperature coefficient of I <sub>sc</sub>	0.06%/°C

### Mechanical Characteristics

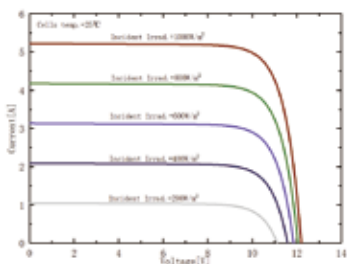
Installation Module Dimension (L×W×H)	545mm×530mm×2.5mm
Weight	0.79 kg
Back material	Back Sheet(black/white)
Cell (quantity / material / type / dimensions)	18(3x6)/Mono /166*83mm /φ223mm
Frame	None
Junction box(Protection degree)	None

### Module Size



### I-V Curve

I-V Curves of SPP050QH18S at different irradiance



I-V Curves of SPP050QH18S at different cell temperature

