

SUNFUTURE

MORE BRIGHT FUTURE FROM

SF-120HCM12

SUNFUTURE

HALF CELL 585W 590W 595W  
600W 605W



**Higher Durability**

Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



**High Power Density**

The unique design provides optimized energy production under inter-row shading conditions



**Half-cell Design**

Less energy loss caused by shading due to new cell string layout and split J-box, and lower cell connection power loss due to half-cell design.



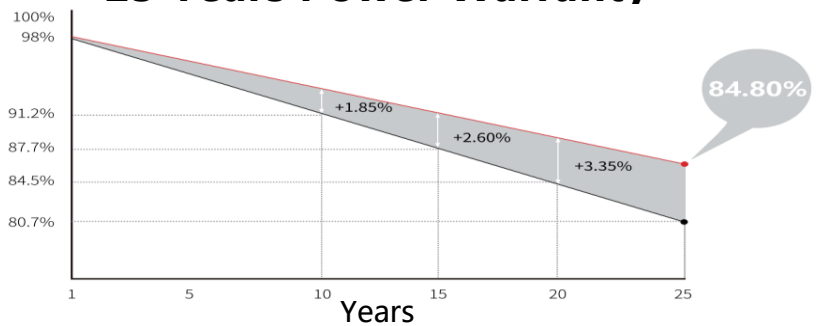
**High Customer Value**

Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time



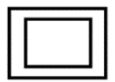
**21.40%**  
MODULE EFFICIENCY  
**12 YEAR**  
PRODUCT WARRANTY  
**0~+5W**  
POWER TOLERANCE

**25 Years Power Warranty**



■ SF's Linear Performance Warranty

■ Industry Standard Warranty



www.sunfuturetech.com

More bright future from Sunfuture

202105V12

# SF- 120HCM12



## ELECTRICAL PERFORMANCE

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

Module type	SF**-120HCM12						
Power output	P <sub>max</sub>	W	585	590	595	600	605
Module efficiency	η <sub>m</sub>	%	20.70	20.80	21.00	21.20	21.40
Voltage at P <sub>max</sub>	V <sub>mp</sub>	V	33.80	34.00	34.20	34.40	34.60
Current at P <sub>max</sub>	I <sub>mp</sub>	A	17.31	17.35	17.40	17.44	17.49
Open-circuit voltage	V <sub>oc</sub>	V	40.90	41.10	41.30	41.50	41.70
Short-circuit current	I <sub>sc</sub>	A	18.37	18.42	18.47	18.52	18.57

STC: 1000W/m<sup>2</sup> irradiance, 25° C cell temperature, AM1.5g spectrum according to EN 60904-3.

Average relative efficiency reduction of 3.0% at 200W/m<sup>2</sup> according to EN 60904-1.

### Electrical parameters at Nominal Operating Cell Temperature (NOCT)

Power output	P <sub>max</sub>	W	443	447	450	454	458
Voltage at P <sub>max</sub>	V <sub>mp</sub>	V	31.60	31.79	31.98	32.16	32.35
Current at P <sub>max</sub>	I <sub>mp</sub>	A	14.02	14.05	14.09	14.13	14.17
Open-circuit voltage	V <sub>oc</sub>	V	38.45	38.63	38.82	39.01	39.20
Short-circuit current	I <sub>sc</sub>	A	14.88	14.92	14.96	15.00	15.04

NOCT: open-circuit module operation temperature at 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, 1m/s wind speed.

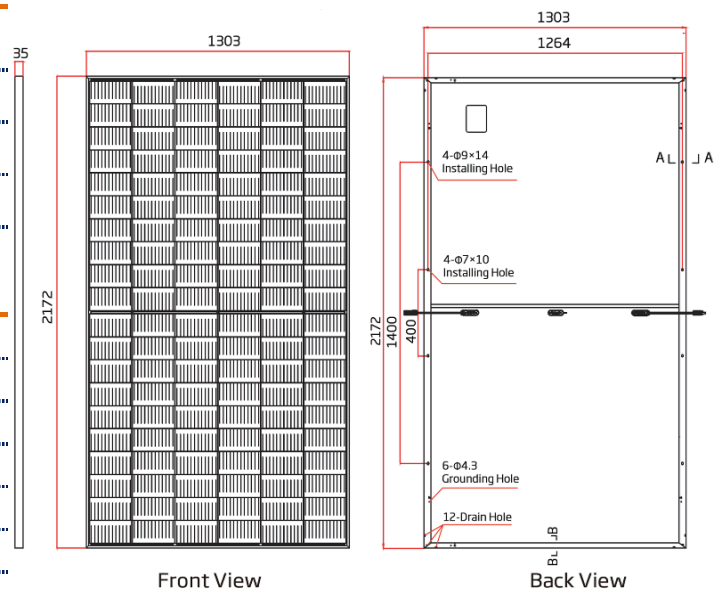
## THERMAL CHARACTERISTICS

### Standard Test Conditions (STC)

Temperature coefficient of P <sub>max</sub>	-0.34%/°C
Temperature coefficient of V <sub>oc</sub>	-0.27%/°C
Temperature coefficient of I <sub>sc</sub>	+0.04%/°C

### OPERATING CONDITIONS & DIMENSION

Max. system voltage	1500VDC
Max. series fuse rating	25A
Operating temperature range	-40°C to 85°C
Max. static load, front (e.g., snow)	5400Pa
Max. static load, back (e.g., wind)	2400Pa
Dimension(mm)	2172×1303×35
Weight	30.9Kg
Frame colour	Silver/Black



Units:mm

[www.sunfuturetech.com](http://www.sunfuturetech.com)

SUNFUTURE NEW ENERGY TECHNOLOGY CO.,LTD.

TEL: +86(0871)63601319/+8613116261718

Email: [info@sunfuturetech.com](mailto:info@sunfuturetech.com)

NO. G124, Building 7, Shuntong Hardware & Electrical city, Shuntong Ave. Ala street office, Economic development zone, Kunming area, China (Yunnan) Free Trade Zone

Facebook: <https://www.facebook.com/Sunfuture-TECH-106964277619197>