

SUNFUTURE



MORE BRIGHT FUTURE FROM

SUNFUTURE

SF-144HCM6

HALF CELL 430W 435W 440W 445W 450W 455W 460W



Higher Durability

The 9-busbar design can decrease the risk of the cell micro-cracks and fingers broken.



High Power Density

High conversion efficiency and more power output per square meter, by lower series resistance and improved light harvesting.



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.



Advanced Glass

Our high-transmission glass features a unique anti-reflective coating that directs more light on the solar cells, resulting in a higher energy yield.



21.20%
CELL EFFICIENCY

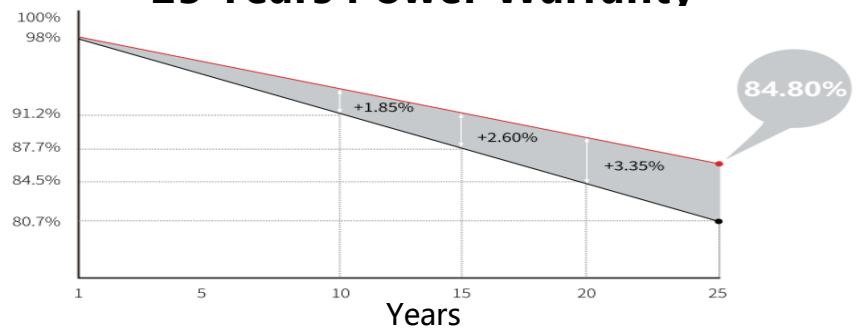
12 YEAR

PRODUCT WARRANTY

0-5W

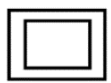
POWER TOLERANCE

25 Years Power Warranty



■ SF's Linear Performance Warranty

■ Industry Standard Warranty



www.sunfuturetech.com

More bright future from Sunfuture

202103V09

ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)

Module type	SF***-144HCM6								
Power output	P_{max}	W	430	435	440	445	450	455	460
Module efficiency	η_m	%	19.80	20.00	20.20	20.50	20.70	20.90	21.2
Voltage at P_{max}	V_{mp}	V	40.70	40.90	41.10	41.30	41.50	41.70	41.9
Current at P_{max}	I_{mp}	A	10.57	10.64	10.71	10.78	10.85	10.92	10.98
Open-circuit voltage	V_{oc}	V	48.50	48.70	48.90	49.10	49.30	49.50	49.7
Short-circuit current	I_{sc}	A	11.31	11.39	11.46	11.53	11.60	11.66	11.73

STC: 1000W/m² irradiance, 25° C cell temperature, AM1.5g spectrum according to EN 60904-3.

Average relative efficiency reduction of 3.0% at 200W/m² according to EN 60904-1.

Electrical parameters at Nominal Operating Cell Temperature (NOCT)

Power output	P_{max}	W	321.2	324.9	328.7	332.4	336.2	339.9	343.6
Voltage at P_{max}	V_{mp}	V	38.05	38.24	38.43	38.62	38.80	38.99	39.18
Current at P_{max}	I_{mp}	A	8.56	8.62	8.68	8.73	8.79	8.85	8.89
Open-circuit voltage	V_{oc}	V	45.59	45.78	45.97	46.15	46.34	46.53	46.72
Short-circuit current	I_{sc}	A	9.16	9.23	9.28	9.34	9.40	9.44	9.50

NOCT: open-circuit module operation temperature at 800W/m² irradiance, 20°C ambient temperature, 1m/s wind speed.

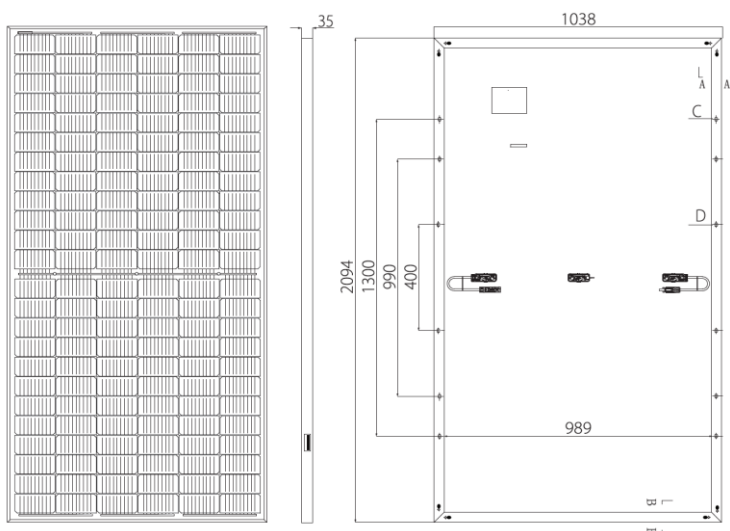
THERMAL CHARACTERISTICS

Standard Test Conditions (STC)

Temperature coefficient of P_{max}	-0.350%/°C
Temperature coefficient of V_{oc}	-0.270%/°C
Temperature coefficient of I_{sc}	+0.048%/°C

OPERATING CONDITIONS & DIMENSION

Max. system voltage	1500VDC
Max. series fuse rating	20A
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)	2094×1038×35
Weight	23.7Kg
Frame colour	Silver/Black



Unit: mm