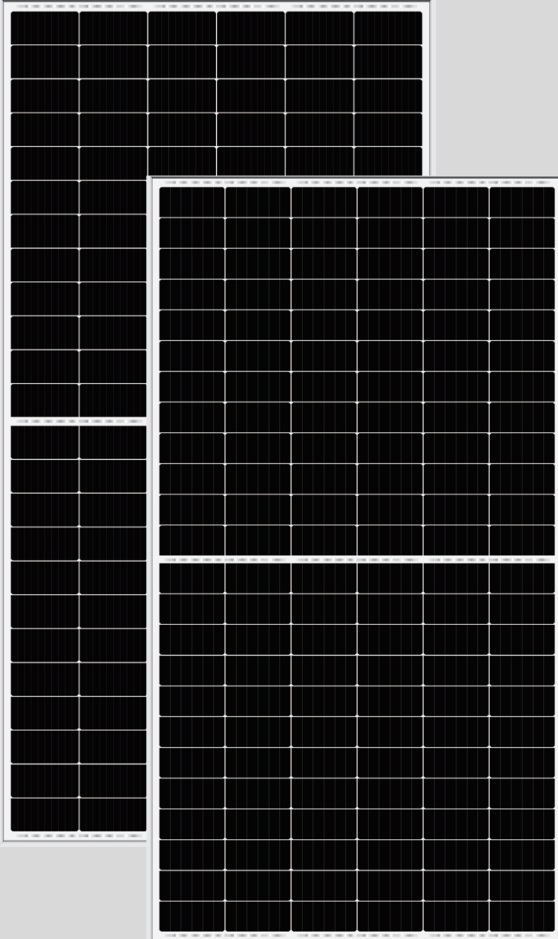


## SF-144HC

## MORE BRIGHT FUTURE FROM

## SUNFUTURE

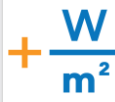


### HALF CELL 405W 410W 415W 420W



#### Higher Durability

The multi-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.

**20.68%**

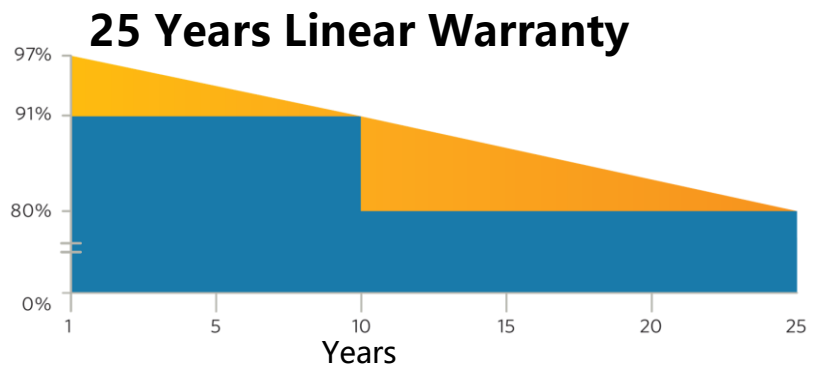
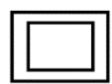
CELL EFFICIENCY

**12 YEAR**

PRODUCT WARRANTY

**0-5W**

POWER TOLERANCE



**SF's Linear Performance Warranty**

**Industry Standard Warranty**

## ELECTRICAL PERFORMANCE

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

Module type	SF***-144HC					
Power output	$P_{max}$	W	405	410	415	420
Module efficiency	$\eta_m$	%	20.20	20.40	20.45	20.48
Voltage at $P_{max}$	$V_{mp}$	V	41.75	41.98	41.75	41.98
Current at $P_{max}$	$I_{mp}$	A	9.70	9.77	9.94	10.00
Open-circuit voltage	$V_{oc}$	V	49.44	49.59	49.62	49.68
Short-circuit current	$I_{sc}$	A	10.21	10.26	10.21	10.26

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	$P_{max}$	W	301.3	305.0	308.8	312.5
Voltage at $P_{max}$	$V_{mp}$	V	38.82	39.04	38.82	39.04
Current at $P_{max}$	$I_{mp}$	A	7.76	7.81	7.95	8.00
Open-circuit voltage	$V_{oc}$	V	46.05	46.19	46.22	46.28
Short-circuit current	$I_{sc}$	A	8.25	8.29	8.25	8.29

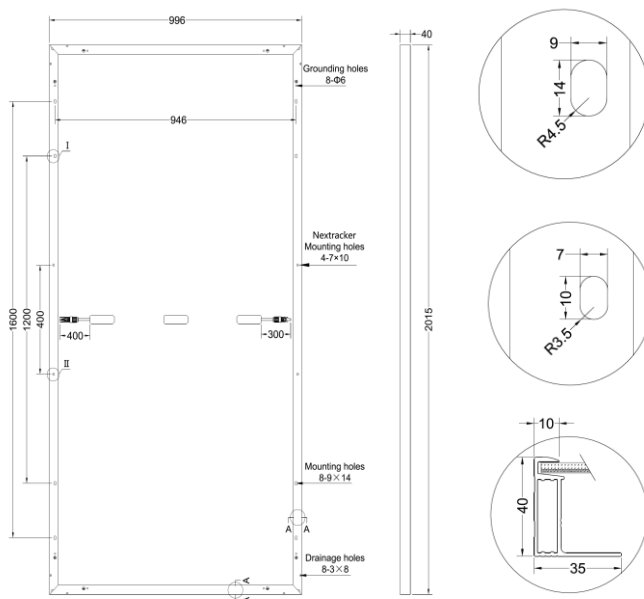
NOCT: open-circuit module operation temperature at 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, 1m/s wind speed.

## THERMAL CHARACTERISTICS

Nominal operating cell temperature (NOCT)	45°C ± 2
Temperature coefficient of $P_{max}$	-0.35%/°C
Temperature coefficient of $V_{oc}$	-0.30%/°C
Temperature coefficient of $I_{sc}$	+0.05%/°C

## OPERATING CONDITIONS & DIMENSION

Max. system voltage	1500V <sub>DC</sub>
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)	2015×996×40
Weight	22.7kg
Frame colour	Silver/Black



Back View

Unit: mm