

SS-520 - 550 144 HALF-CUT MONOPERC MODULE

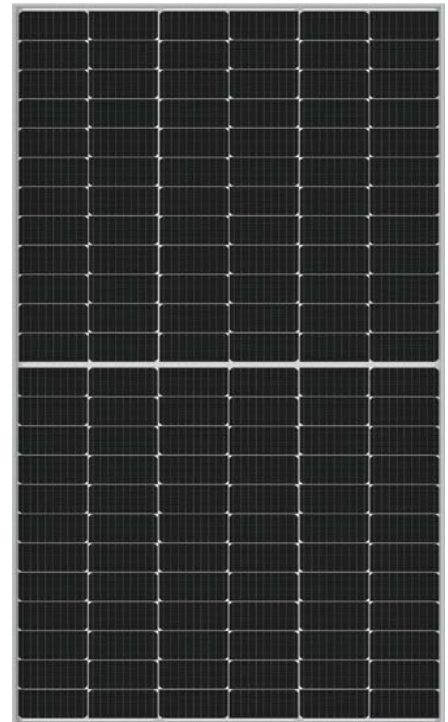
POWER OUTPUT

520-550 Wp

MAX EFFICIENCY

21.28%

Features



High module conversion efficiency

Module max efficiency 21.28% achieved through advanced cell technology and manufacturing process



Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



Sahaj current sorting process

Up to 2% power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output



Extended wind and snow load tests

Module tested to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)



Excellent weak light performance

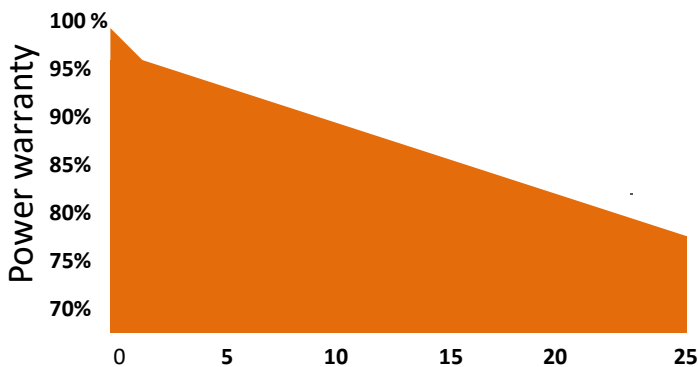
More power output in weak light condition, such as cloudy, morning and sunset



Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farmland and coast line

Industry-leading Warranty



- ◆ First year power degradation: <2.0%
- ◆ 2 - 25 year linear annual power degradation: <0.55%

Quality Certifications

ISO 9001:2015 - Quality Management System
ISO 14001:2015 - Environment Management System
ISO 45001:2018 - Occupational Health and Safety



- ◆ Product warranty: 10 years
- ◆ Linear power warranty: 25 year

Electrical Characteristics (STC)

Module Type	SS-520	SS-525	SS-530	SS-535	SS-540	SS-545	SS-550
Maximum Power (Pmax/W)	520	525	530	535	540	545	550
Optimum Operating Voltage(Vmp/V)	40.84	40.93	41.02	41.11	41.21	41.30	41.95
Optimum Operating Current (Imp/A)	12.74	12.83	12.93	13.03	13.11	13.21	13.12
Open Circuit Voltage (Voc/V)	49.21	49.33	49.43	49.51	49.68	49.76	49.80
Short Circuit Current (Isc/A)	13.51	13.63	13.70	13.82	13.94	13.99	13.98
Module Efficiency (%)	20.12	20.31	20.51	20.70	20.89	21.09	21.28

STC: irradiance 1000 W/m², module temperature 25 °C, AM=1.5, wind speed 1 m/s,

Tolerance of Pmax is within +/- 2 %

Electrical Characteristics (NOCT)

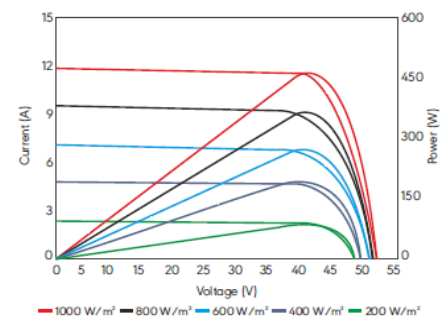
Module Type	SS-520	SS-525	SS-530	SS-535	SS-540	SS-545	SS-550
Maximum Power (Pmax/W)	383	386	390	394	397	401	405
Optimum Operating Voltage(Vmp/V)	38.75	38.79	38.82	38.86	38.90	38.94	38.93
Optimum Operating Current (Imp/A)	9.87	9.96	10.04	10.13	10.21	10.30	10.39
Open Circuit Voltage (Voc/V)	46.01	46.05	46.08	46.12	46.16	46.19	46.53
Short Circuit Current (Isc/A)	10.57	10.66	10.75	10.85	10.94	11.03	11.14
Module Efficiency (%)	14.80	14.94	15.09	15.23	15.37	15.51	15.65

NOCT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

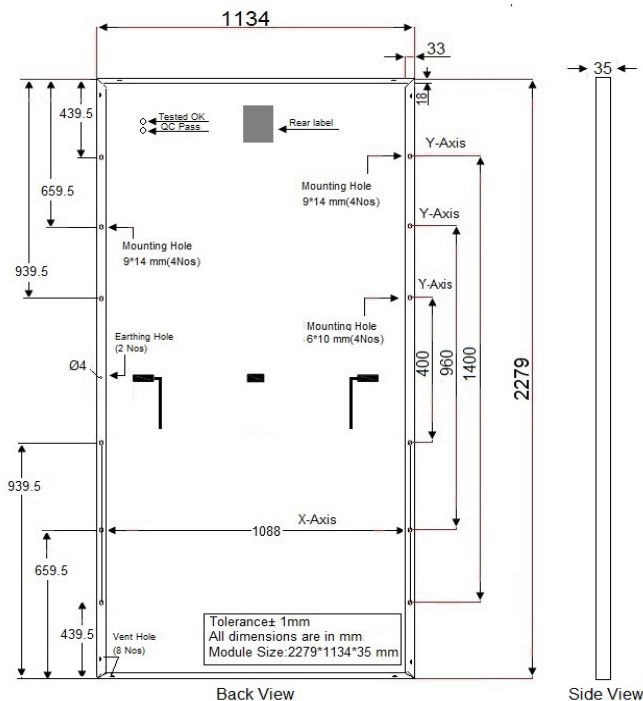
Temperatures Characteristics

Nominal Module Operating Temperature (NMOT)	45 ± 2 °C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.06%/°C

Current-Voltage Curve



MODULE DRAWING



Note: Frame profile 35*33 mm (long) and 35*18 mm (short)

Mechanical Characteristics

Solar Cell	Monoperc 182 mm
No. of Cells	144 (6 × 24)
Dimensions	2279x1134x35 mm
Weight	29 kgs
Front cover	3.2 mm ARC Glass Anodized
Frame	Aluminum Alloy
Junction Box	IP68 rated (3 bypass diodes)
Maximum System Voltage	1500 VDC
Maximum Series Fuse Rating	25 A
Power Tolerance	0/+5 W

Information on how to install and operate this product is available in the installation instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.