

SR5-72HBD 530-550M

MAXIMUM EFFICIENCY %

POSITIVE POWER TOLERANCE WP

21.50

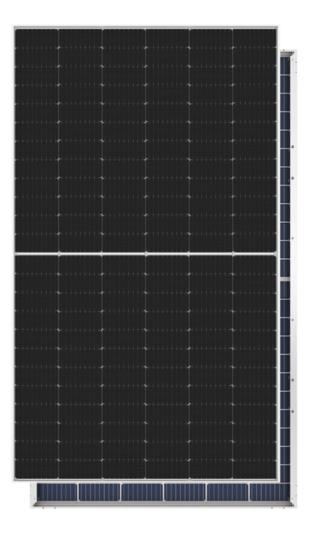
0~+5.00

ELLS

M10 144

MODULE TECHNOLOGY
HALF CUT & MICRO
GAP DESIGN







ANTI-STAINING PERFORMANCE of the backsheet ensures reduced CLEANING FREQUENCY OF REAR SIDE of the module, leading to reduction in water usage



CYLINDRICAL TABBING WIRE is used to reduce the shadow on cell active area



UP TO 15% POWER GAIN from ground facing side depending upon the albedo of the ground surface



Implementation of bypass diodes in split JB seriesparallel connections enable the module to perform in PARTIAL SHADOW CONDITIONS with respect to fullcell module



HIGHER NUMBER OF BUSBAR makes the PV modules less prone to loss in efficiency and increase tolerance to micro cracks



FIELD RELIABILITY is improved due to multiple contact points on the cell which lowers the cell stress during module fabrication



Due to LIGHT WEIGHT hassle-free installation of bifacial module is done with increased robustness also in east west direction



LCOE IS CUT BACK by using M10 size solar cell with adding more power output than lower size cell module



LOWER INTERNAL RESISTANCE boosts module power helping to achieve minimal power loss with respect to previous variant modules

Linear Performance Warranty







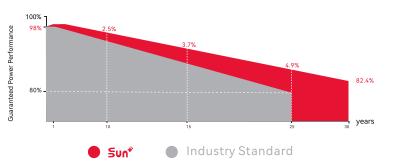
Frame











MECHANICAL SPECIFICATION

Cell Type Monocrystalline
Cell Dimensions 182x182mm
Cell Arrangement 144 (6x24)
Weight 32.2kg (71lbs.)
Module Dimensions 2256x1134x35mm (88.82x44.65x1.38inches)
Cable Length 300mm in Length or Customized Length
Cable Cross Section Size 4mm² (IEC), 12AWG(UL)

Front Glass Dual glass, 2.0+2.0mm heat strengthened glass

No. of Bypass Diodes 3
Packing Configuration (1) 31pcs/carton, 620pcs/40hq
Packing Configuration (for USA) 31pcs/carton, 620pcs/40hq

Frame Anodized Aluminium Alloy

Junction Box Ip68

OPERATING CONDITIONS

Maximun System Voltage 1500V DC(IEC/UL)

Operating Temperature $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ Maximun Series Fuse 30A

Static Loading Snow Loading: 5400Pa/ Wind Loading: 2400Pa

Bifaciality 70±5%

Safety Class

Hailstone Test 25mm Hailstone at speed of 23m/s

Connector MC4 Compatible

TEMPERATURE COEFFICIENT

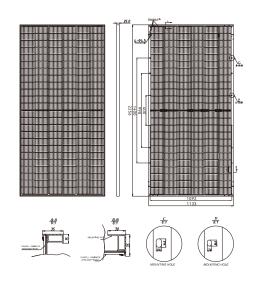
Temperature Coefficient Pmax -0.340%°C

Temperature Coefficient Voc -0.265%°C

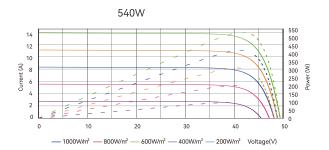
Temperature Coefficient Isc +0.050%°C

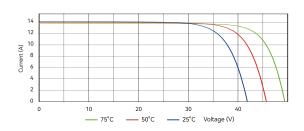
NMOT 43±2°C

TECHNICAL DRAWINGS



I-V CURVE





ELECTRICAL PARAMETERS

Testing Condition	STC	NMOT								
Maximum Power (Pmax/W)	530	396	535	399	540	403	545	407	550	411
Operating Voltage (Vmpp/V)	41.35	38.58	41.50	38.72	41.65	38.86	41.80	39.00	41.95	39.14
Operating Current (Impp/A)	12.82	10.27	12.90	10.33	12.97	10.39	13.04	10.45	13.12	10.51
Open-Circuit Voltage (Voc/V)	49.20	46.26	49.35	46.40	49.50	46.54	49.65	46.68	49.80	46.82
Short-Circuit Current (Isc/A)	13.71	11.07	13.78	11.12	13.85	11.17	13.92	11.23	13.99	11.29
Module Efficiency ηm(%)	20).70	20	0.90	2	1.10	2	1.30	2	1.50

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperatue 20°C, Air Mass AM1.5, Wind Speed 1m/s

REAR SIDE POWER GAIN(REFERENCE TO 530W FRONT)

Pmax gain	5%	10%	15%	20%	25%
Pmax/W	557	583	610	636	663
Vmpp/V	41.32	41.32	41.32	41.32	41.32
Impp/A	13.47	14.11	14.75	15.40	16.04
Voc/V	49.32	49.32	49.32	49.32	49.32
Isc/A	14.41	15.09	15.78	16.46	17.15