



SR4-72HBD 530-550M

MAXIMUM EFFICIENCY %

21.30

POSITIVE POWER TOLERANCE WP

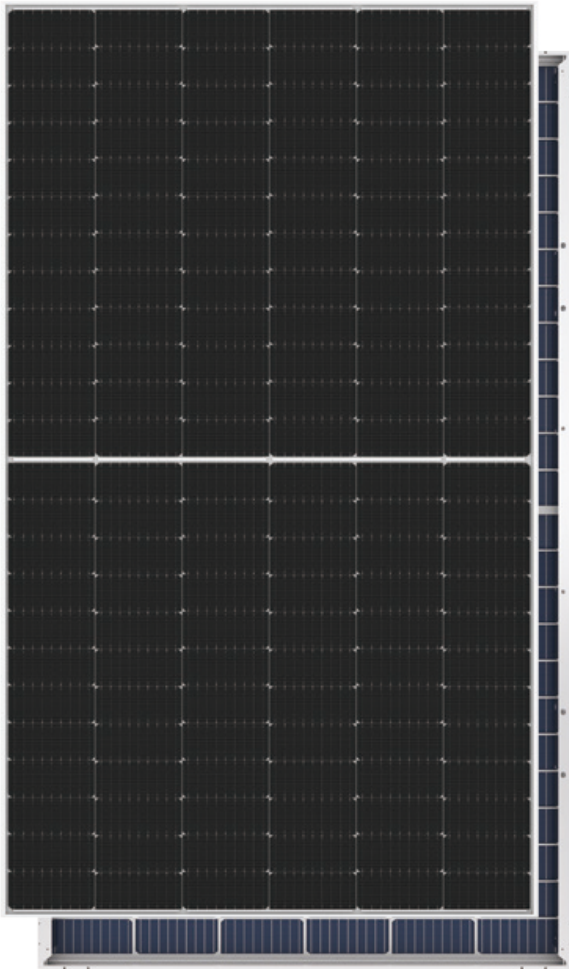
0~+5.00

CELLS

M10 144

MODULE TECHNOLOGY

HALF CUT & MICRO GAP DESIGN
WITH IMPROVED SHADE TOLERANCE



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 series-parallel connections enable the module to perform in PARTIAL SHADOW CONDITIONS with respect to full-cell 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

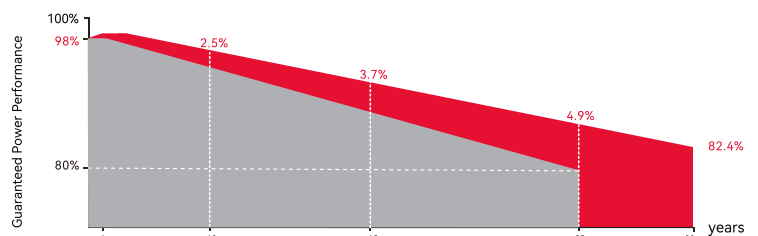
Linear Performance Warranty



Bill of Material Tier 1

25 years Quality assurance

30 years Power output guarantee



Industry Standard

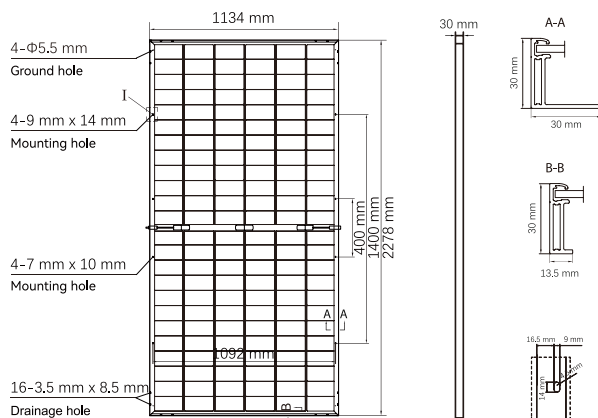
Frame



MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182mm
Cell Arrangement	144 (6x24)
Weight	32.2kg (71lbs.)
Module Dimensions	2278x1134x30mm (88.68x44.65x1.18inches)
Cable Length(Including Connector)	Portrait: (+)350 mm,(-)250 mm Length can be customized
Cable Cross Section Size	4mm ² (IEC), 12AWG(UL)
Front Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Connector type (IEC/UL)	HCB40 (Standard) / MC4-EVO2A (Optional)
Packing Configuration (1)	36pcs/carton, 720pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68,3 diodes

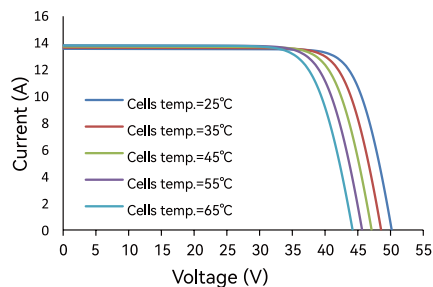
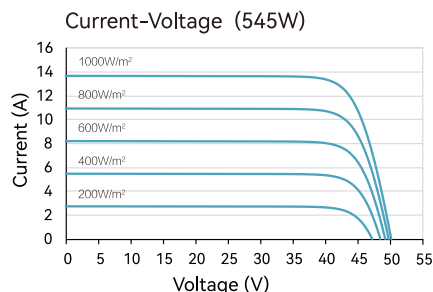
TECHNICAL DRAWINGS



OPERATING CONDITIONS

Maximun System Voltage	1500V DC(IEC/UL)
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	30A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Bifaciality	70±5%
Safety Class	II
Hailstone Test	25mm Hailstone at speed of 23m/s
Connector	MC4 Compatible

I-V CURVE



TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.340%/°C
Temperature Coefficient Voc	-0.265%/°C
Temperature Coefficient Isc	+0.050%/°C
NMOT	43±2°C

ELECTRICAL PARAMETERS

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	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(%)	20.50		20.70		20.90		21.10		21.30	

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperatur 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



[1] Specifications included in this datasheet are subject to change without notice. SUNPLUS reserves the right of final interpretation. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

[2] Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.