SD Corporation

Sustainable Renewable Energy Solutions for a Greener Future

www.sustdevcorp.com

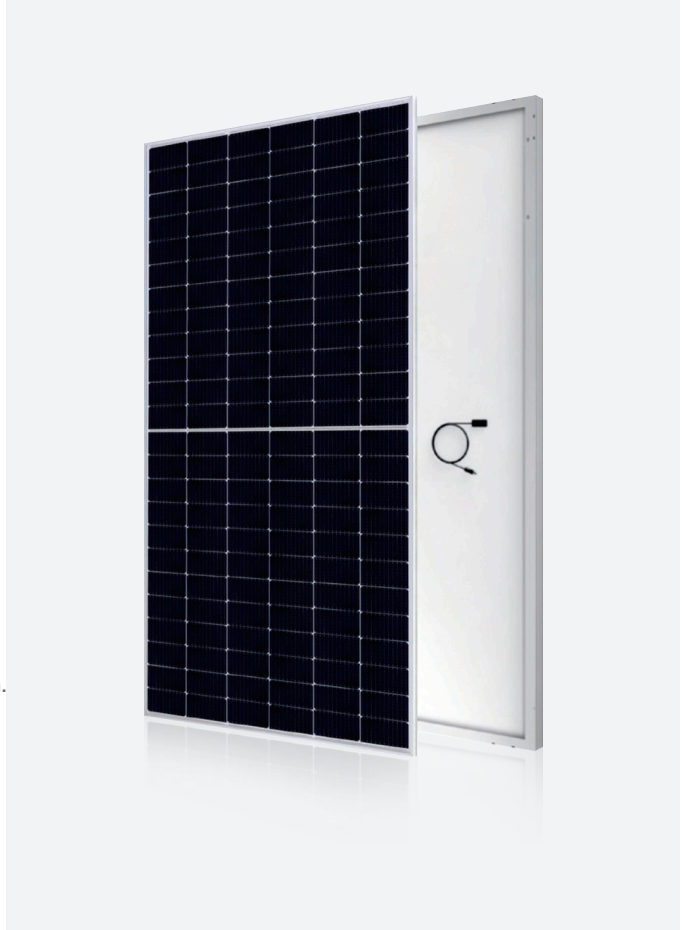
Sustainability Development Corporation (Pty) Ltd

SD Corporation

525-550W

182 Series

Mono Solar Module
144 Cells Single-glass
Multi-busbar
Half-cut Modules



Non-destructive Cutting
Higher battery bending strength and module mechaniacl performance.

Higher Customer Value
Up to 25% extra power gain Lower BOS cost and LCOE.

High-efficiency PERC+battery Technology
High module power and efficiency Lower power attenuation.

Certified to Withstand the Most Challenging Environmental Conditions
2400Pa wind load 5400Pa snow load.

Highly Efficient and Reliable Components

Advanced production equipment highly automated process control world-class production technology.

Excellent weak light performance resistant to salt spray and ammonia corrosion.

Certified by international quality management and environmental management system.

The company has a product research and development laboratory that meets the new ISO/IEC international standards.

Passing the certification test of the PV standards.

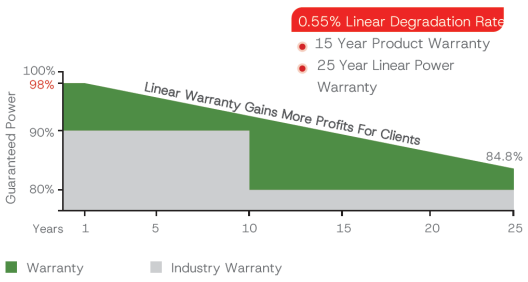
Application grade: A Safe grade Fireproofing gardeC

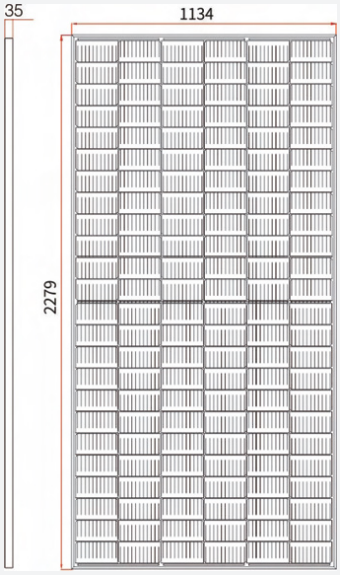
Comprehensive Products And System Certificates

RECYCLABLE PACKAGING

IEC61215/IEC61730/UL1703/IEC61701/IEC62716
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 45001: Occupational Health and Safety Management System
GB/T 23001-2017 Integrated Management System

Industry-leading Linear Warranty



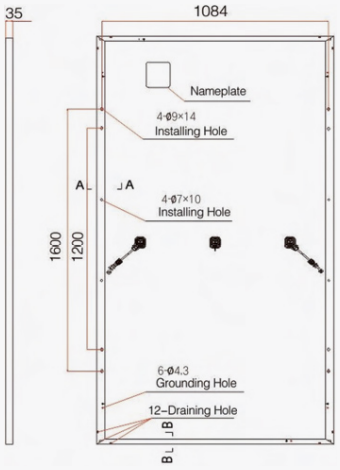


Electrical Data STC						
Power Output Tolerance-Pmax (Wp)	525	530	535	540	545	550
Power Output Tolerance-PMAX(W)	0 ~ +5					
Maximum Power Voltage-Vmpp (V)	41.15	41.31	41.47	41.64	41.80	41.96
Maximum Power Current-Impp (A)	12.76	12.83	12.90	12.97	13.04	13.11
Open Circuit Voltage-Voc (V)	49.15	49.30	49.45	49.60	49.75	49.90
Short Circuit Current-Isc (A)	13.65	13.72	13.79	13.86	13.93	14.00
Module Efficiency-nm(%)	20.3	20.5	20.7	20.9	21.1	21.3

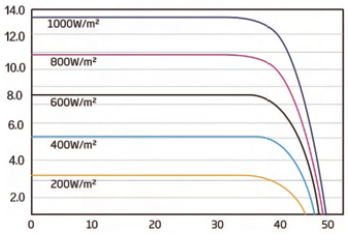
STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5

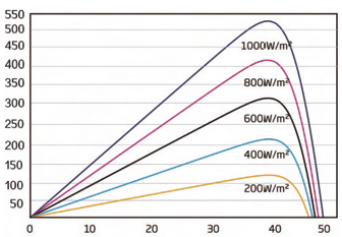
Electrical Data (NOCT)						
Maximum Power-PMAX (Wp)	397	401	405	408	412	416
Maximum Power Voltage-Vmpp (V)	38.36	38.57	38.79	39.00	39.20	39.43
Maximum Power Current-Impp (A)	10.35	10.40	10.44	10.48	10.52	10.56
Open Circuit Voltage-Voc (V)	46.05	46.18	46.31	46.43	46.55	46.68
Short Circuit Current-Isc (A)	11.07	11.01	11.05	11.09	11.13	11.17

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s



Mechanical Data	
Solar Cells	Monocrystalline
Cell Orientation	144 Cell (6×24)
Module Dimensions	2279×1134×35mm (89.72×44.65×1.38 inches)
Weight	28.5kg (62.83 lb)
Front Glass	3.2mm(0.13inches),High Transmission,Strengthened Costed Glass
Encapsulant Material	EVA
Backsheet	White
Frame	36mm (1.38inches) Anodized Aluminium Alloy
J-Box	IP 68 Rated
Cables	4.0mm², 350mm Photovoltaic Special Cable, or Customized
Connector	MC4, QC4





Temperature Rating	
NOCT(Normal Operating Cell Temperature)	45°C (±2°C)
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C

Limit Parameters	
Operating Temperature	-40°C ~ 85°C
Maximum System Voltage	1500V DC(IEC)
Max Series Fuse Rating	25A

(DO NOT connect Fuse in Combiner Box with two or more strings at parallel connection)