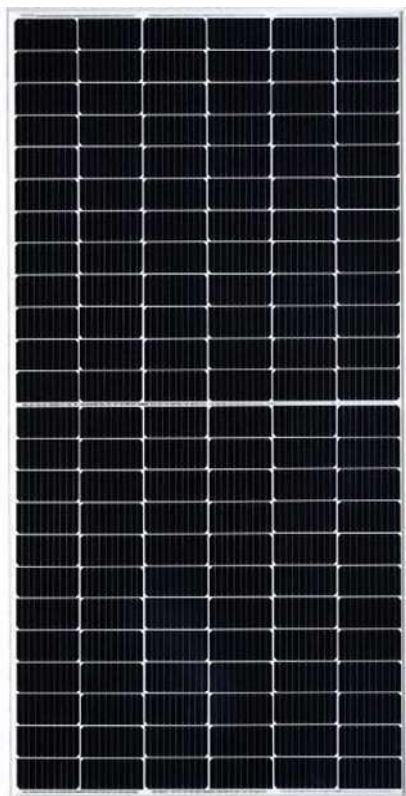


MONO PERC - 144 Cells

525 Wp | 530 Wp | 535 Wp | 540 Wp | 545 Wp | 550 Wp
 SGE XXX-144 MHC (XXX-525-550 Wp)



Key Features

- 
High Module Conversion Efficiency
 Module efficiency up to 21.2 % achieved through advanced cell technology and manufacturing process.
- 
Advanced Technology
 MBB- Multi Busbar (10BB) / Halfcut MONOPERC cells /Ga Doped Wafers.
- 
Positive Tolerance Cell Output
 Guaranteed 0~+4.99 Wp positive tolerance to ensure Power output.
- 
Excellent Weak Light Performance
 Advanced glass and surface texturing allow for excellent performance in low-light environment.
- 
Extended Wind and Snow load Tests
 Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).
- 
Excellent PID Resistance
 Excellent Anti-PID performance guarantee limited power degradation and certified for up-to 288 Hrs.
- 
Withstanding Harsh Environment
 Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline, ammonia.
- 
Rigorous Testing Criteria
 100% EL inspection ensuring defect-free modules.
- 
Current Sorting
 To minimize the current mismatch losses to maximizesystem power output.

Certifications & Standards

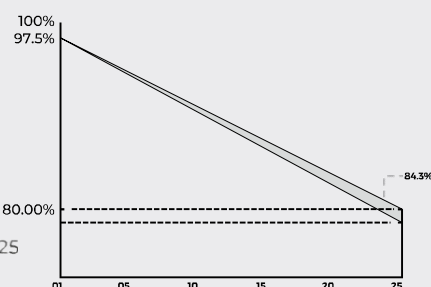
IEC 61215, IEC 61730, IEC 61701,
 UL 61730 CEC, CEC-Aus, IEC 62716,
 IEC 62759, IEC 62804, IEC 62782,
 IEC 60068-2-68, IEC 61853

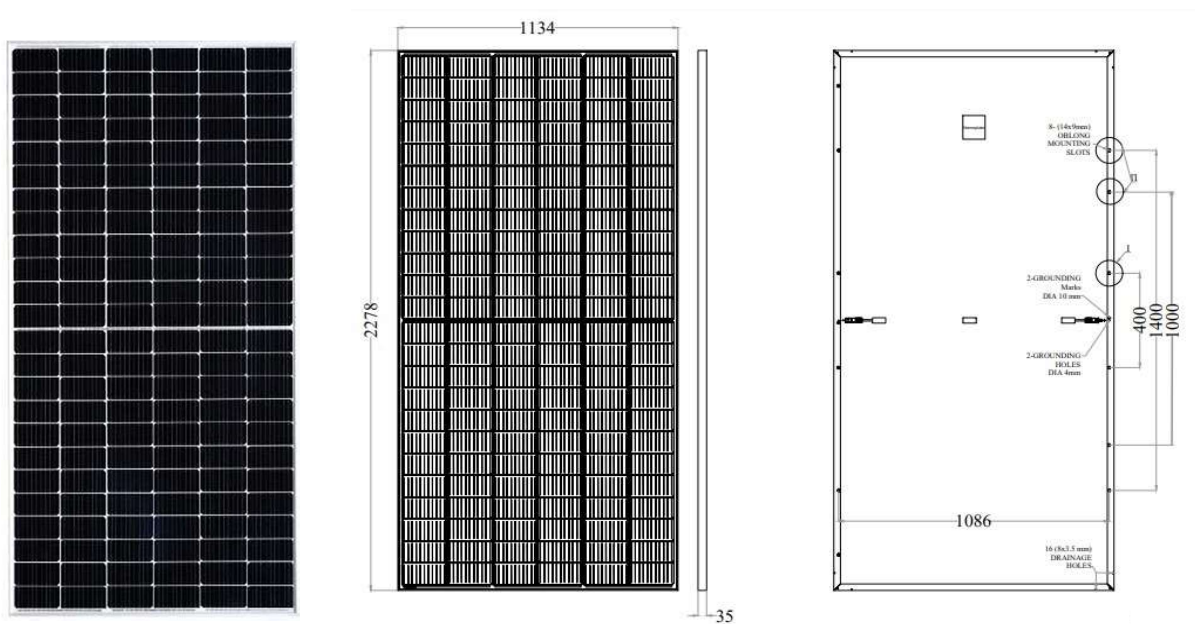
Certifications



Linear Performance Warranty

Product Warranty 12 Years :
 Material & Processing First year
 Degradation up-to -2.5%
 Linear power output 25 Years: 2-25
 Annual Degradation - 0.55%





ELECTRICAL DATA PERFORMANCE

Conditions	Unit	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Pmax(0 ~+ 4.99]	Wp	525	393.2	530	397.5	535	401.3	540	405.0	545	408.8	550	410.96
Maximum voltage	Vmpp	41.34	38.29	41.5	38.48	41.65	38.68	41.8	38.79	42.08	38.8	42.14	28.92
Maximum current	Impp	12.71	10.27	12.78	10.33	12.86	10.39	12.94	10.46	12.97	10.46	13.08	10.56
Open circuit voltage	Voc	49.60	45.94	49.80	46.17	49.98	46.41	50.16	46.54	50.27	46.56	50.58	47.75
Short circuit current	Isc	13.35	10.78	13.42	10.85	13.50	10.91	13.59	10.98	13.65	11.08	13.73	11.09
Module Efficiency (%)		20.32		20.51		20.70		20.90		21.10		21.29	
Operating Temperature (°C)								-40°C~+85°C					
Maximum system voltage								1500 VDC					
Maximum series fuse rating								25A					
Power tolerance								0~+3%					
Temperature coefficients of Pmax								-0.36%/°C					
Temperature coefficients of Voc								-0.28%/°C					
Temperature coefficients of Isc								0.048%/°C					
Nominal operating cell temperature (NOCT)								45±2°C					
Fire Safety								Class-C					
Application								Class-A					
Safety Class								Class-II					

*STC irradiance 1000 W/m² module temperature 25 °C, Am=1.5; NOCT: Irradiance 800 W/m², ambient temperature 20°C, Am=1.5, Wind speed 1m/s. Average power reduction of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty +/-3%.

MODULE MECHANICAL DATA

SPECIFICATION DATA

Cell Type	Half Cut-PERC Monocrystalline, 144Cells
Dimensions	2278X1134X35 mm
Weight	28 kgs
Front Cover	3.2 mm Tempered Glass
Backsheet	Composite Film
Frame Material	Silver Anodized Aluminium Profile (black frame on request)
J-Box	IP68, 3 diodes
Cable	350mm, 4mm ²
Connectors	Mc4 Compatible Connector

I-V Characteristics At Different Irradiations

PV module : Saatvik Green Energy Private Limited, SGE540-144MHC

