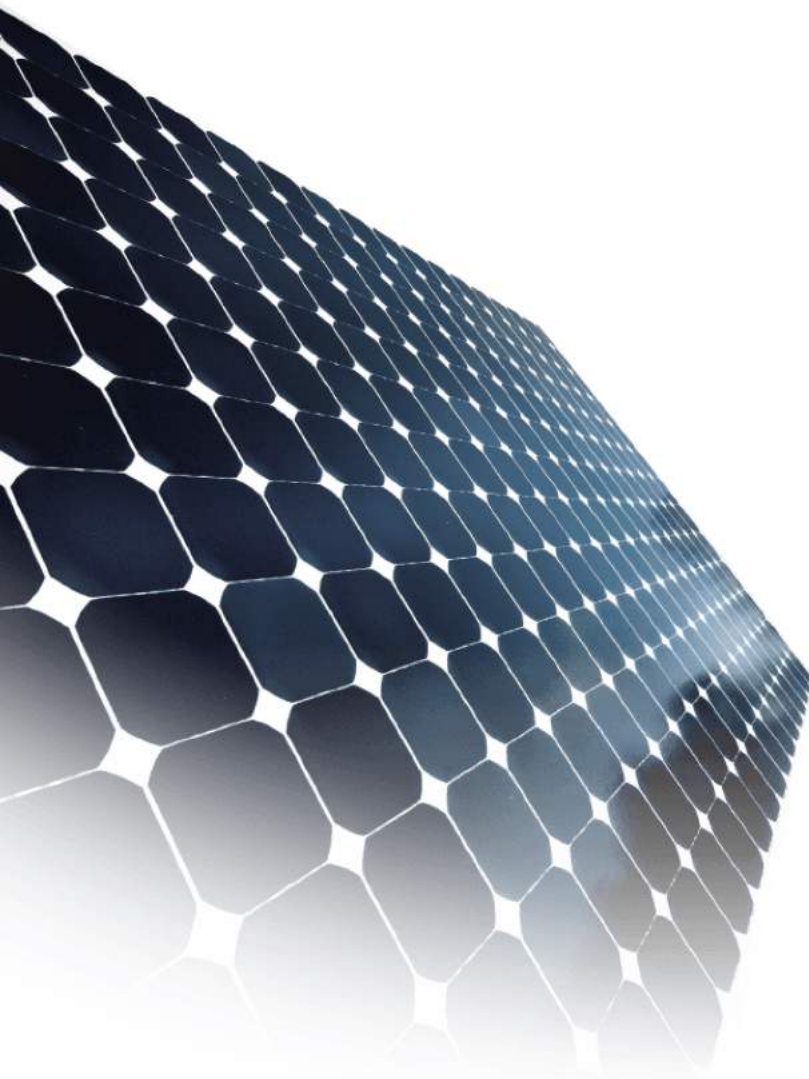


# MONO PERC -144 Cells

525 Wp | 530 Wp | 535 Wp | 540 Wp | 545 Wp



## Key Features

- 
**High Module Conversion Efficiency**  
 Module efficiency up to 21.0 % 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 maximize system power output.

## Linear Performance Warranty

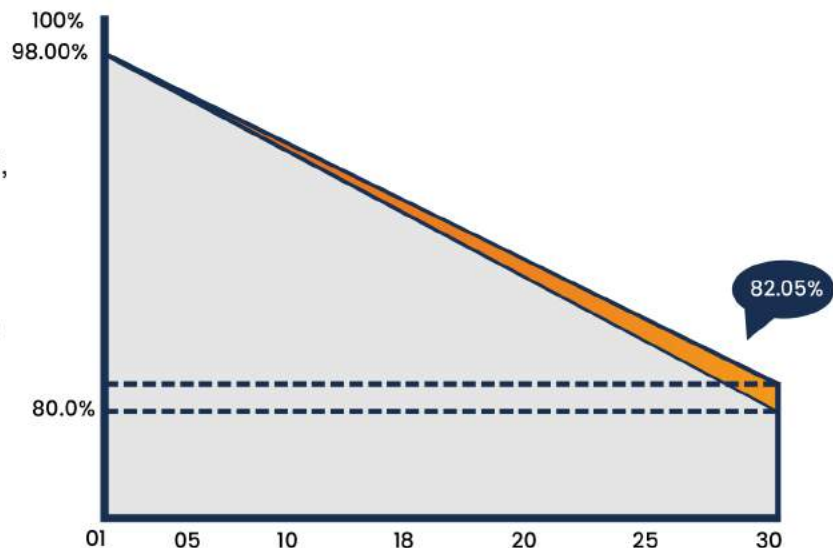
Product Warranty 12 Years: Material & Processing.  
 First year Degradation Upto -2.5 %  
 Linear Power output 30 : 2-30 Annual degradation -0.55%

## Certifications and standards

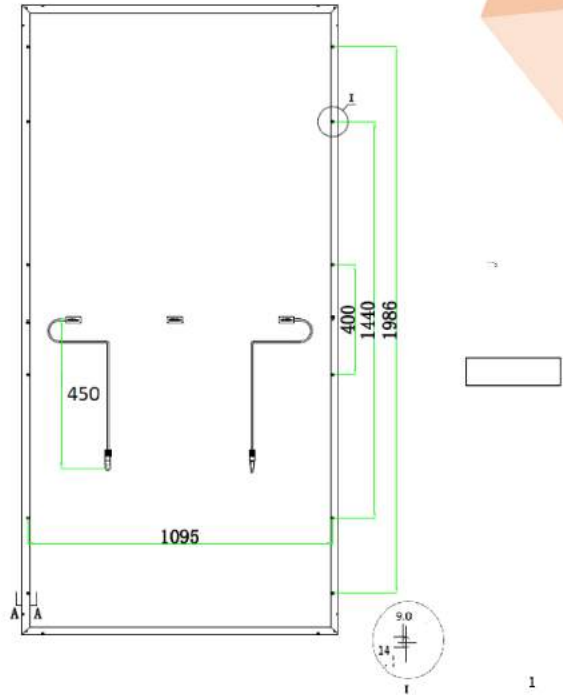
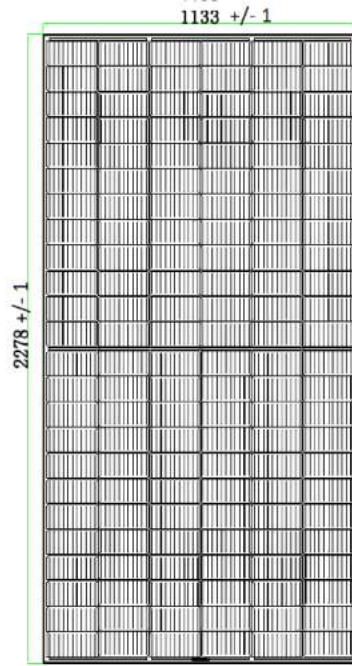
IEC 61215, IEC 61730, IEC 61701, UL 61730 CEC, CEC-Aus, IEC 62716, IEC 62759, IEC 62804, IEC 62782, IEC 60068-2-68, IEC 61853



Certification are under progress



\* this is Preliminary datasheet subject to Change



### Electrical Data Performance

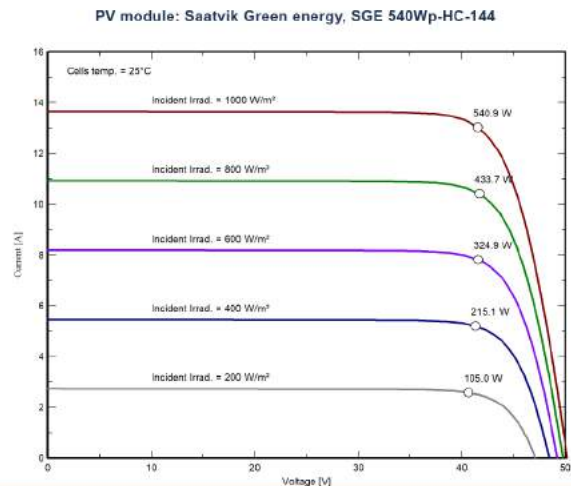
Conditions	Unit	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Pmax(0 ~+ 4.99)Wp	(Wp)	525	393.2	530	397.5	535	401.3	540	405.0	545	408.8
Maximum voltage, Vmpp	(V)	41.34	38.29	41.5	38.48	41.65	38.68	41.8	38.79	42.08	38.8
Maximum current, Impp	(A)	12.71	10.27	12.78	10.33	12.86	10.39	12.94	10.46	8.92	10.46
Open circuit voltage, Voc	(V)	49.60	45.94	49.80	46.176	49.98	46.416	50.16	46.548	50.496	46.56
Short circuit current, Isc	(A)	13.35	10.78	13.42	10.85	13.50	10.91	13.59	10.98	9.37	10.98
<b>Module Efficiency(%)</b>	(%)	<b>20.34</b>		<b>20.54</b>		<b>20.73</b>		<b>20.93</b>		<b>21.12</b>	
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/m<sup>2</sup> module temperature 25° C, Am=1.5; NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, Am=1.5, Wind speed 1m/s. Average power reduction of 4.5% at 200 W/m<sup>2</sup> as per IEC 60904-1. Measuring Uncertainty +/- 3%

### MODULE MECHANICAL DATA

SPECIFICATION	DATA
Cell Type	Half Cut- PERC Monocrystalline, 144 Cells
Dimensions	2278X1133X35mm
Weight	29 kgs
Front Cover	3.2 mm Tempered Glass
Backsheet	Composite Film
Frame Material	Silver Anodized Aluminium Profile, (black frame on request)
J-Box	IP67, 3 diodes
Cable	450mm, 4mm <sup>2</sup>
Connectors	MC4 Compatible Connector IEC/UL Certified
Standard Packaging	31 Pieces/Pallet
Module Pieces per Container	620 pieces (40* HC)

### I-V Characteristics At Different Irradiations



\* this is Preliminary datasheet subject to Change .