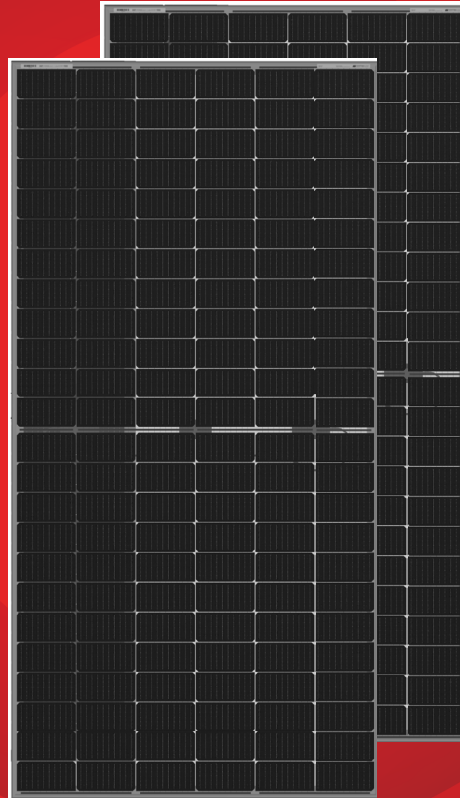




High Performance Guarantee!

27 years
performance
warranty

12 years
product
warranty

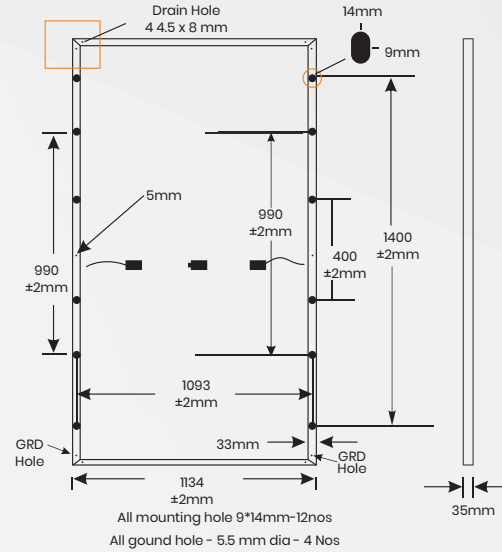
Solar PV Module (DCR/NON-DCR) 144 Mono PERC Half-Cut Bifacial Module

Range - NSM 525Wp to 560Wp

Leading Features

 Ideal For residential rooftop and Large Scale Installations	 High Power with Bifacial	 Better Shading Tolerance	 Lower Lcoe & System Cost	 Excellent Temperature Performance
 Non-destructive Cutting	MODULE EFFICIENCY UP TO 21.67%	POWER TOLERANCE UP TO 4.99W	PID RESISTANT	

Figure 1 shows the dimensions of the test specimen. The specimen is a rectangular grid of 11 columns and 22 rows of small square cells. The overall width is 1134 ± 2mm, and the overall height is 2278 ± 2mm.



The graph shows the relationship between voltage, current, and power for different irradiance levels. The x-axis represents Voltage (V) from 0 to 55. The left y-axis represents Current (A) from 0 to 15, and the right y-axis represents Power (W) from 0 to 600. Six curves are plotted, each corresponding to a specific irradiance level: 1000 W/m² (red), 800 W/m² (black), 600 W/m² (blue), 400 W/m² (dark blue), 200 W/m² (green), and 100 W/m² (light green). The current curves show a linear increase in current with voltage up to a certain point, followed by a sharp drop. The power curves show a peak power value for each irradiance level, with the peak power increasing as the irradiance increases.

Irradiance (W/m²)	Color	Approx. Peak Voltage (V)	Approx. Peak Current (A)	Approx. Peak Power (W)
1000	Red	40	11.5	450
800	Black	40	9.0	360
600	Blue	40	6.5	260
400	Dark Blue	40	4.5	180
200	Green	40	2.5	100
100	Light Green	40	1.5	60

Module Type	NSM525 – 144		NSM530 – 144		NSM535 – 144		NSM540 – 144		NSM545 – 144		NSM550 – 144		NSM555 – 144		NSM560 – 144	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts (Pmax)	525	390.46	530	393.99	535	397.67	540	401.28	545	405.17	550	408.80	555	412.53	560	416.29
Maximum Power Voltage (Vmp)	41.54	39.00	41.76	39.20	41.99	39.42	42.21	39.63	42.46	39.86	42.68	40.07	42.91	40.28	43.14	40.50
Maximum Power Current (Imp)	12.64	10.01	12.69	10.05	12.74	10.09	12.79	10.13	12.84	10.16	12.88	10.20	12.93	10.24	12.98	10.28
Open-circuit voltage (Voc)	49.80	45.77	49.94	45.92	50.0	46.06	50.16	46.20	50.3	46.35	50.49	46.51	50.62	46.66	50.75	46.81
Short-circuit current (Isc) (A)	13.45	10.74	13.5	10.77	13.56	10.81	13.60	10.84	13.65	10.88	13.69	10.91	13.74	10.94	13.78	10.98
Module Efficiency STC (%)	20.32		20.51		20.71		20.90		21.09		21.29		21.48		21.67	
Operating Temperature (°C)	-40°C ~ +85°C															
Maximum System Voltage	1500 V DC (IEC)															
Maximum series fuse rating	20A															

Module Type	NSM525 – 144	NSM530 – 144	NSM535 – 144	NSM540 – 144	NSM545 – 144	NSM550 – 144	NSM555 – 144	NSM560 – 144
10 % Gain	577.5	583.0	588.5	594.0	599.5	605.0	610.5	616.0
15 % Gain	603.8	609.5	615.3	621.0	626.8	632.5	638.3	644.0
20 % Gain	630.0	636.0	642.0	648.0	654.0	660.0	666.0	672.0
25 % Gain	656.3	662.5	668.8	675.0	681.3	687.5	693.8	700.0
30 % Gain	682.5	689.0	695.5	702.0	708.5	715.0	721.5	728.0

Specification	Data
Cell Type	Half cut Mono PERC
Cell Arrangement	72 Mono PERC ~ 144 Half Cells
Dimensions	2278x1134x35 mm
Mounting Hole	Y - 400 / 990 / 1400 mm
Weight	29 Kg.
Front Cover	3.2 mm ARC Glass
Frame Material	Anodized Aluminium Alloy
Junction Box	IP68 Split JB
Cable	4 mm² (IEC) - Length 0.35 mtr (Potrait)/ 1.4mtr(Landscape)
Connectors	MC4 Compatible
By-Pass Diodes	3 Pcs
Configuration	Transperant

Specification	Data
Temperature Co-efficient (Pmax)	-0.34% /°C
Temperature Co-efficient (Voc)	-0.26% /°C
Temperature Co-efficient (Isc)	+0.040% /°C
Nominal Operating Cell Temperature	42 ± 2°C

SCAN THE
QR CODE
SOLAR
CATALOGUE