



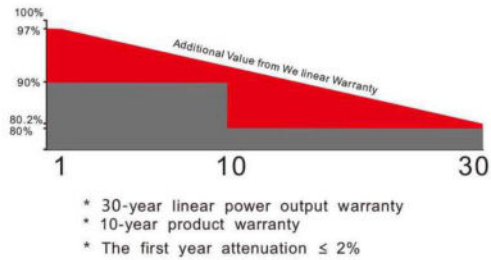
NES144/525-550W
182mm MBB
Bifacial Half Cell Mono Solar Panel

Key Features

- 
Half Cell
 The power of Half-cell solar panel increases, and the hot spot temperature reduces because of lower working current
- 
Positive Tolerance
 Positive tolerance of up to 0~+5W delivers higher outputs reliability
- 
High PID Resistant
 Advanced cell technology and qualified materials lead to high PID resistant
- 
Current Sorting Process
 System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage
- 
Extended Wind and Snow load tests
 Module certified to withstand extreme wind (2400 Pascal) and snow loads(5400 Pascal)
- 
1500V
 Backsheet and junction box supporting 1500V system

Quality Guarantee

Industry-Leading Warranty Based on Nominal Power



- *MBB solar cells , Low resistance loss and higher conversion efficiency
- *Double EL test before and after lamination, highly control product defects
- *Solar panel classified by current, to improve system performance

Certificates

- *ISO9001:2015
- *ISO14001:2015
- *ISO45001:2018
- *TUV、CE、CQC、SGS、INMETRO、DEKRA



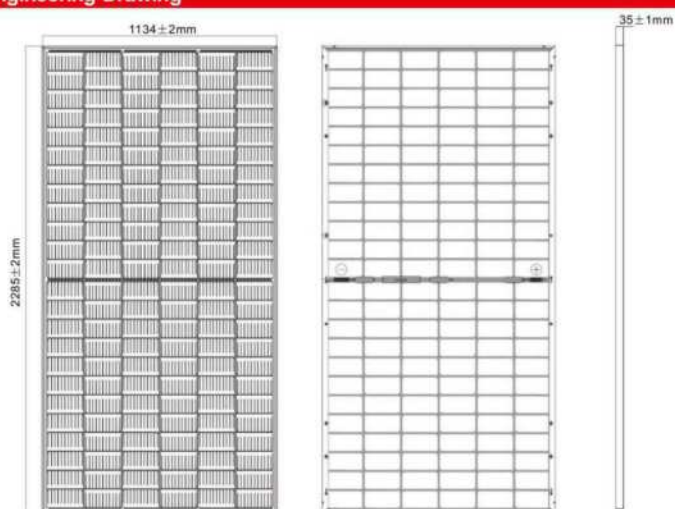
NES144/525-550W 182mm MBB Bifacial Half Cell Mono Solar Panel

Electrical Characteristics

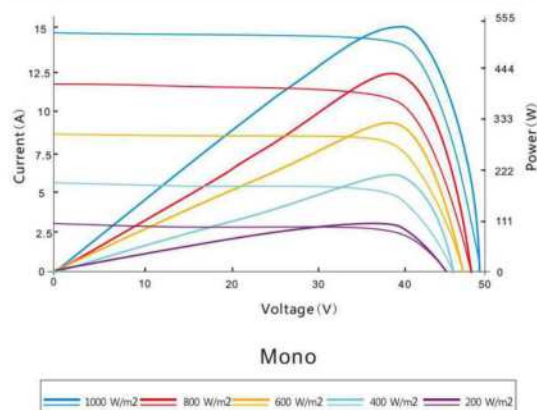
STC	NES144-7-525M	NES144-7-530M	NES144-7-535M	NES144-7-540M	NES144-7-545M	NES144-7-550M
Maximum Power(Pmax)	525W	530W	535W	540W	545W	550W
Optimum Operating Voltage(Vmp)	41.15V	41.31V	41.47V	41.64V	41.80V	41.96V
Optimum Operating Current(Imp)	12.76A	12.83A	12.90A	12.97A	13.04A	13.11A
Open Circuit Voltage(Voc)	49.15V	49.30V	49.45V	49.60V	49.75V	49.90V
Short Circuit Current(Isc)	13.65A	13.72A	13.79A	13.86A	13.93A	14.00A
Module Efficiency	20.26%	20.45%	20.64%	20.84%	21.03%	21.23%
Operating Module Temperature	-40°C to +85°C					
Maximum System Voltage	1500V DC (IEC)					
Power Tolerance	0~+5W					

STC Irradiance 1000 W/m², module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used

Engineering Drawing



I-V Curve



Excellent performance under weak light conditions: at an irradiance intensity of 800W/m² (AM 1.5, 25°C), 95.5% or higher of the STC efficiency(1000W/m²) is achieved.

Mechanical Characteristics

Solar Cell	182mm MBB Monocrystalline silicon cells
No. of Cells	144(6x12x2)
Dimensions	2285±2mmx1134±2mmx35±1mm
Weight	31.6kg±3%
Front Glass	3.2mm(0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated
Output Cables	TÜV (2Pfg1169:2007) 4.0 mm ² (0.006 inches ²), 300mm/Customized
Connectors	MC4 connectors

Temperature Characteristics

NOCT	45±2°C
Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Isc	0.045%/°C

Packing Configuration(35mm)

Per Pallet	30Pieces
Per Container (20' GP)	250Pieces
Per Container (40' HQ)	624Pieces

Note: Specifications subject to technical changes and tests, We reserves the right of final interpretation.
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