NES144/525-550W
F 35mm
MBB Half Cell Mono SolarPane

About Us

(CETCsolar) located in Jiaxing,Zhejiang Province.Formly New Energy Sector of No.36 Research Institute of CETC(No.36 Research Institute),is a holding company of No.36 Research Institute.Our core products are PV modules,commercial,public and household PV system,PV micro system. We have a professional system design capability, specializes in design,construction,operation and maintenance for distributed PV power station and environmental PV system, has a Zhejiang Province key enterprise nstitute---Institute of PV equipment and intellgent control.

We will uphold the rigorous style of military workers,provide the best quality products and service to our customers and help them create value.

Key Features

Half Cell
The power of Hall-cellsolar panel increases,and the hot spot temperature reduces because of lower working curet

Positve Tolerance
Postive tolerance of up to 0~+5W delivers higher outputs reliabity

High PID Resistant
Advanced celltechnology and qualifed materials ead to high PID resistant

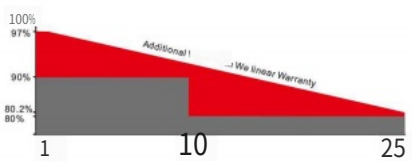
Current Sorting Process
System output maximized by educing mismatch losses up to 2% with modules sorted & packaged by amperage

Extended Wind and Snow load tests
Module certified to withstand extreme wind (2400 Pascal) and snow loads(5400 Pascal)

1500V
Backshee and juncton box supporting 1500V system

Quality Guarantee

IndustryLeading Waranty Based on Nominal Power



*25-year linear power output warranty
· 10-year product warranty
· The irst year attenuation ≤ 2%

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

Certificates

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

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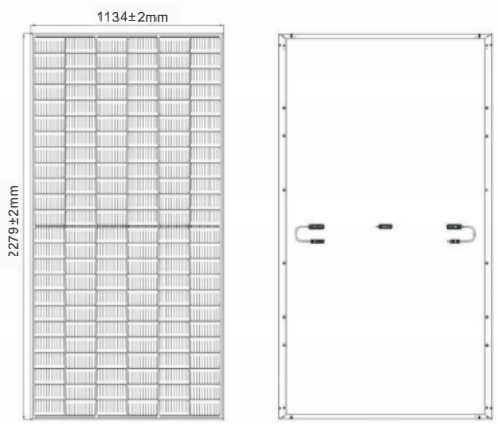
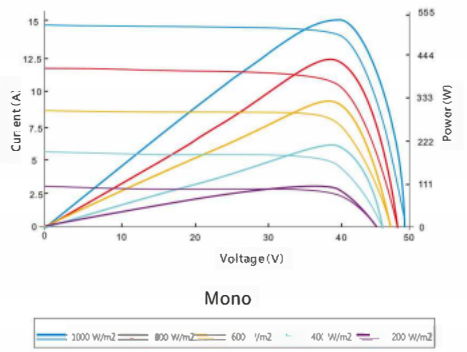
Electrical Characteristics

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	20.31%	20.51%	20.70%	20.90%	21.09%	21.28%
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 irradiation intensity of 800W/m² (AM 1.5, 25°C), 96.5% 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	2279±2mmx1134±2mmx35±1mm
Weight	28.6kg±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 mm² (0.006 inches²), 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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