

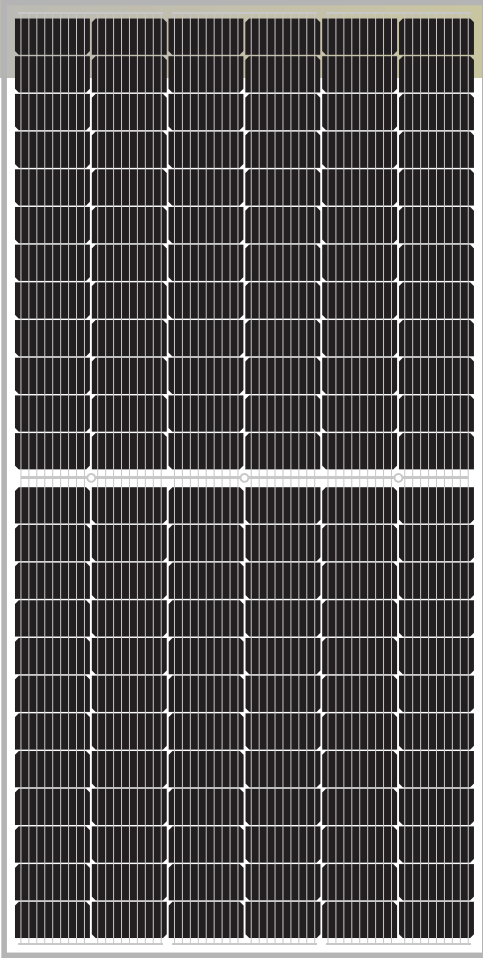


FROM STRENGTH TO STRENGTH IN NATURE

NESE 450-72MHB

MONO PERC HALF-CELL BIFACIAL SOLAR MODULE

FROM CAMBODIA



KEY FEATURES



High efficiency PERC

A high efficiency 166 (M6) PERC solar cell with 9 busbars technology to ensure the efficiency of the solar module up to 20.70% and stable operation.



Bifacial power generation

Increases 10-30% power generation revenue.



Excellent performance with weak light

More power output with a weak light condition-through advanced glass and solar cells.



Wind/Snow load

Wind load 2400 pa, snow load 5400 pa.



PID

Pid Free

Excellent Anti-PID performance, minimized the degradation of power.



Resistance of extreme environment conditions

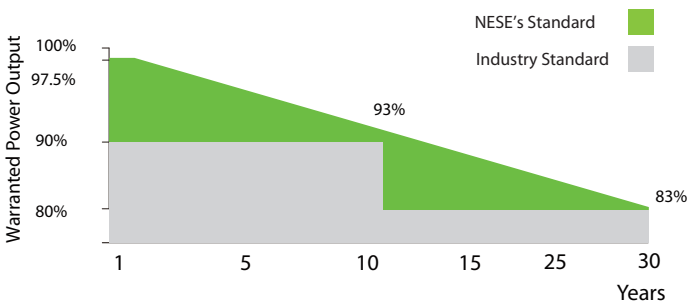
High Salt Mist and Ammonia resistance certified by TUV.

INSURED BY

CHUBB® Munich RE 

LINEAR PERFORMANCE WARRANTY

12 years product warranty. 30 years linear power warranty.



MANAGEMENT SYSTEM CERTIFICATES

ISO 9001:2015/QUALITY MANAGEMENT SYSTEM
ISO 14001:2015/STANDARDS FOR ENVIRONMENTAL MANAGEMENT SYSTEM

PRODUCT CERTIFICATES

IEC 61215/IEC 61730:VDE/CE/CEC AU
UL 61730: CSA



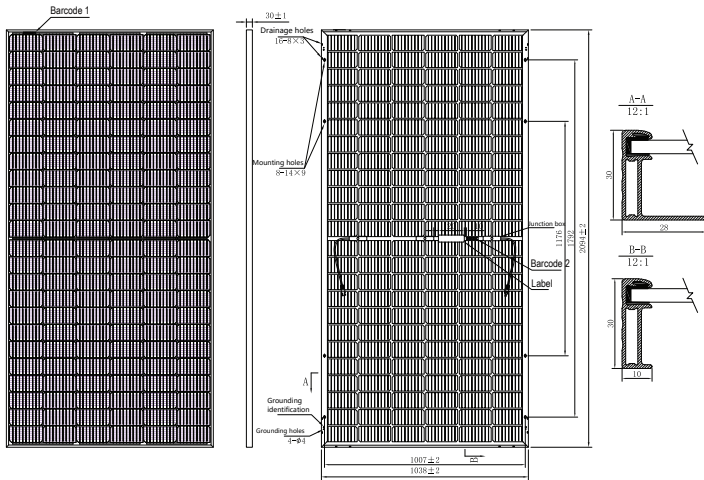
PHUM TANOUN, SANGKAT KOMBOUL, KHAN POSENCHAY, PHNOM PENH, KINGDOM OF CAMBODIA

WWW.NESOLAR.COM.KH

SPECIFICATIONS

Module type	NESE 430-72MHB		NESE 435-72MHB		NESE 440-72MHB		NESE445-72MHB		NESE450-72MHB	
	STC	(NOCT)	STC	(NOCT)	STC	(NOCT)	STC	(NOCT)	STC	(NOCT)
Maximum power(Pmax)	430Wp	320Wp	435Wp	324Wp	440Wp	328Wp	445Wp	331Wp	410Wp	301Wp
Maximum power voltage(Vmp)	41.3	38.2V	41.5V	38.4V	41.7V	38.5V	41.9V	38.7V	41.3V	38.2V
Maximum power current (Imp)	10.42A	8.39A	10.49A	8.44A	10.56A	8.50A	10.63A	8.53A	9.93A	7.88A
Open-circuit voltage(Voc)	49.7V	46.3V	49.9V	46.5V	50.1V	46.6V	50.3V	46.8V	49.4V	45.8V
Short-circuit current(Isc)	11.07A	8.94A	11.14A	8.99A	11.21A	9.05A	11.28A	9.11A	10.49A	8.47A
Module efficiency STC (%)	19.78%		20.01%		20.24%		20.47%		20.70%	
Operating temperature(°C)	-40°C ~ 85°C									
Maximum system voltage	1000/1500 (IEC&UL)									
Maximum series fuse rating	20A									
Sorting power tolerance	0 ~ +3%									
Temperature coefficients of Pmax	-0.36%/°C									
Temperature coefficients of Voc	-0.29%/°C									
Temperature coefficients of Isc	+0.05%/°C									
Nominal operating cell temperature(NOCT)	44 ± 2°C									
Refer. Bifacial Factor	70 ±5%									

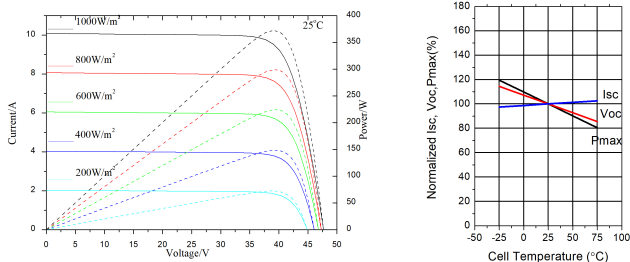
ENGINEERING DRAWING



MATERIAL CHARACTERISTICS

Number of cell	144 (6 * 24)
Dimensions	2094*1038*30
Weight	28kg
Front glass	2.0mm+2.0mm heat strengthened glass
Frame	Anodized aluminium alloy
Junction box	Ip68 , 3 diodes
Output cables	12 awg, length: 350 mm (13.78inch) or Customized length
Connectors	MC4-Compatible

ELECTRICAL PERFORMANCE & TEMPREATURE DEPENDENCE



Electrical performance & temperature dependence
Current-voltage & power-voltage curves (450W)
temperature dependence of Isc, Voc, Pmax

PACKAGING CONFIGURATION

20GP	360PCS
40GP	792PCS
40HQ	792PCS