

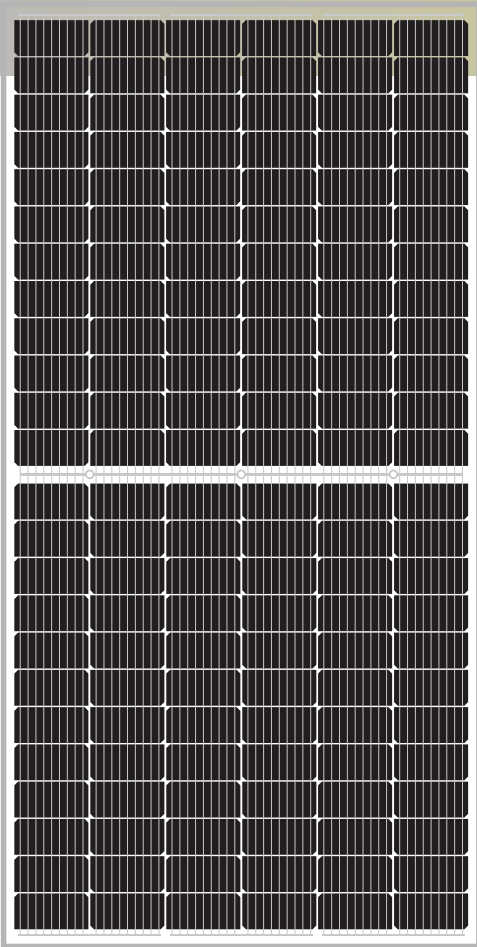


FROM STRENGTH TO STRENGTH IN NATURE

NESE 450-72MH

MONO PERC HALF-CELL 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.



0-5W tolerance

0- 5W positive power tolerance.



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 Free

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



Resistance of extreme environment conditions

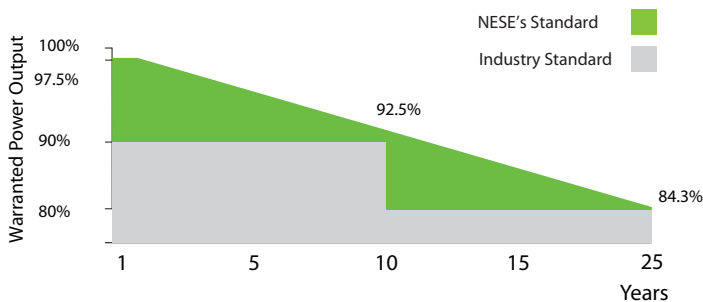
High Salt Mist and Ammonia resistance certified by TUV.

INSURED BY

CHUBB® Munich RE

LINEAR PERFORMANCE WARRANTY

12 years product warranty. 25 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



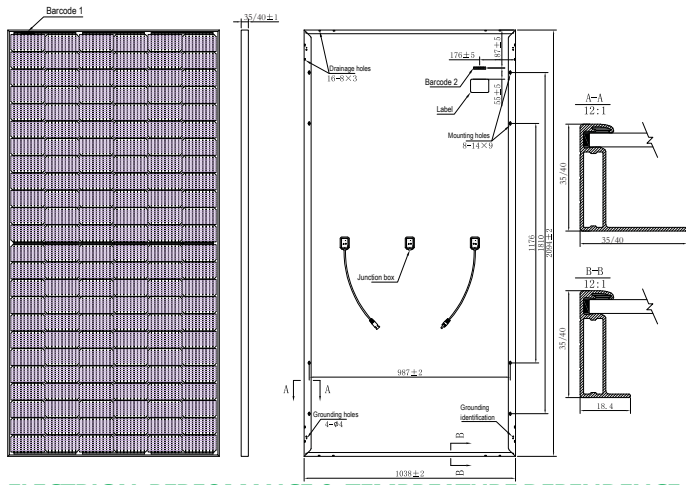
PHUM TANOUN, SANGKAT KOMBOUL, KHAN POSENCHAY, PHNOM PENH, KINGDOM OF CAMBODIA

WWW.NESOLAR.COM.KH

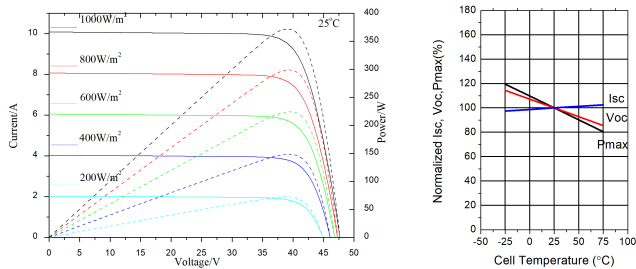
SPECIFICATIONS

| Module type | NESE 430-72MH | | NESE 435-72MH | | NESE 440-72MH | | NESE445-72MH | | NESE450-72MH | |
|--|--------------------|--------|---------------|--------|---------------|--------|--------------|--------|--------------|--------|
| | STC | (NOCT) | STC | (NOCT) | STC | (NOCT) | STC | (NOCT) | STC | (NOCT) |
| Maximum power(Pmax) | 430Wp | 322Wp | 435Wp | 325Wp | 440Wp | 329Wp | 445Wp | 333Wp | 450Wp | 337Wp |
| Maximum power voltage(Vmp) | 40.6 | 37.9V | 40.8V | 38.1V | 41.0V | 38.2V | 41.2V | 38.4V | 41.4V | 38.6V |
| Maximum power current (Imp) | 10.60A | 8.49A | 10.67A | 8.54A | 10.74A | 8.60A | 10.81A | 8.66A | 10.88A | 8.72A |
| Open-circuit voltage(Voc) | 49.5V | 46.2V | 49.7V | 46.4V | 49.9V | 46.6V | 50.1V | 46.7V | 50.3V | 46.9V |
| Short-circuit current(Isc) | 11.19A | 9.04A | 11.26A | 9.09A | 11.33A | 9.15A | 11.40A | 9.21A | 11.47A | 9.27A |
| 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 | | | | | | | | | |

ENGINEERING DRAWING



ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE



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

MATERIAL CHARACTERISTICS

| | |
|----------------|---|
| Number of cell | 144 (6 * 24) |
| Dimensions | 2094*1038*35/40 |
| Weight | 24.0/24.1kg |
| Front glass | 3.2mm, anti-reflection Coating, high transmission, low iron, tempered glass |
| Frame | Anodized aluminium alloy |
| Junction box | IP68 rated 3 Diodes |
| Output cables | 12 awg, length: 350-1200 mm (13.78-47.24 inch) or Customized length |
| Connectors | MC4-Compatible |
| 40HQ | 638/715PCS |

PACKAGING CONFIGURATION