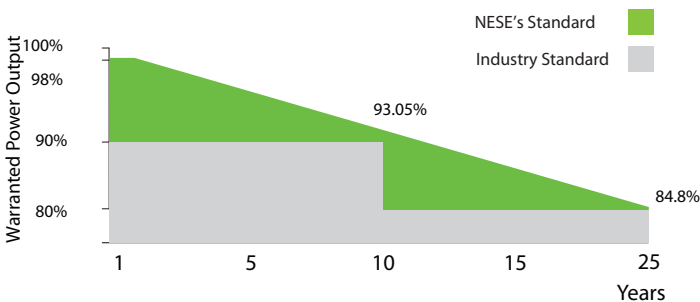


INSURED BY

CHUBB® Munich RE 

LINEAR PERFORMANCE WARRANTY

12 years product warranty. 25 years linear power warranty.



KEY FEATURES



High efficiency PERC

A high efficiency 182 (M10) PERC solar cell with 10 busbars technology to ensure the efficiency of the solar module up to 21.08% 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.

MANAGEMENT SYSTEM CERTIFICATES

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

PRODUCT CERTIFICATES

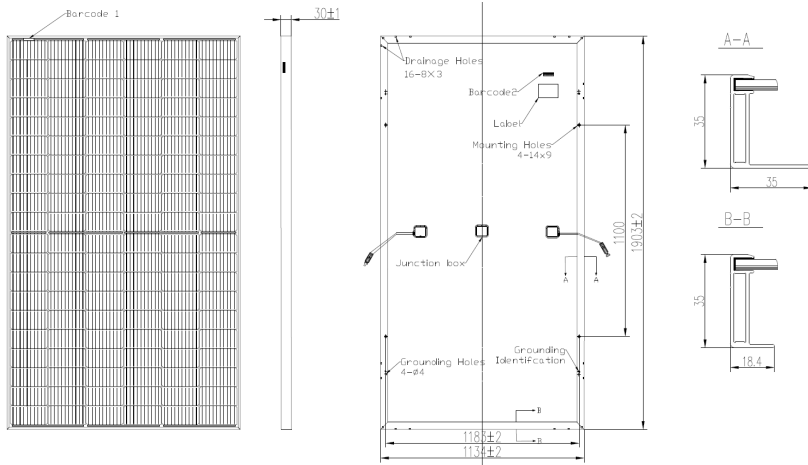
IEC 61215/IEC 61730:VDE/CE/CEC AU
UL 61730: CSA



SPECIFICATIONS

| Module type | NESE 435-60MH-M10 | | NESE 440-60MH-M10 | | NESE 445-60MH-M10 | | NESE 455-60MH-M10 | | NESE 450-60MH-M10 | |
|--|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|-------------------|--------|
| | STC | (NOCT) | STC | (NOCT) | STC | (NOCT) | STC | (NOCT) | STC | (NOCT) |
| Maximum power(Pmax) | 435Wp | 325Wp | 440Wp | 329Wp | 445Wp | 333Wp | 450Wp | 336Wp | 455Wp | 340Wp |
| Maximum power voltage(Vmp) | 33.9V | 31.5V | 34.1V | 31.7V | 34.3V | 31.9V | 34.5V | 32.1V | 34.7V | 32.3V |
| Maximum power current (Imp) | 12.84A | 10.31A | 12.91A | 10.37A | 12.98A | 10.43A | 13.05A | 10.48A | 13.12A | 10.54A |
| Open-circuit voltage(Voc) | 40.8V | 38.1V | 41.0V | 38.3V | 41.2V | 38.5V | 41.4V | 38.7V | 41.6V | 38.9V |
| Short-circuit current(Isc) | 13.57A | 10.96A | 13.64A | 11.02A | 13.71A | 11.07A | 13.78A | 11.13A | 13.85A | 11.18A |
| Module efficiency STC (%) | 20.16% | | 20.39% | | 20.62% | | 20.85% | | 21.08% | |
| Operating temperature(°C) | -40°C ~ 85°C | | | | | | | | | |
| Maximum system voltage | 1500(IEC&UL) | | | | | | | | | |
| Maximum series fuse rating | 25A | | | | | | | | | |
| Sorting power tolerance | 0 ~ +3% | | | | | | | | | |
| Temperature coefficients of Pmax | -0.35%/°C | | | | | | | | | |
| Temperature coefficients of Voc | -0.29%/°C | | | | | | | | | |
| Temperature coefficients of Isc | +0.05%/°C | | | | | | | | | |
| Nominal operating cell temperature(NOCT) | 44 ± 2°C | | | | | | | | | |

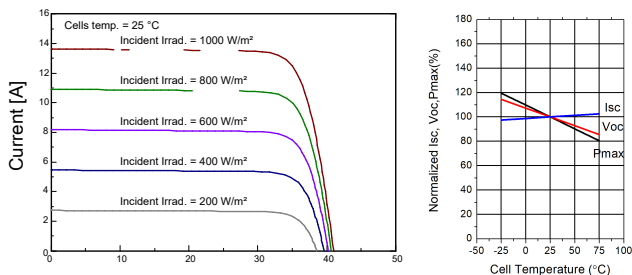
ENGINEERING DRAWING



MATERIAL CHARACTERISTICS

| | |
|--------------------------------|---|
| Number of cell | 120 (6 * 20) |
| Dimensions | 1903*1134 *35 |
| Weight | 23.2+/-1.0kg |
| 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 or Customized |
| PACKAGING CONFIGURATION | |
| 40HQ | 744PCS |

ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE



Electrical performance & temperature dependence
Current-voltage & power-voltage curves (440W)
temperature dependence of Isc, Voc, Pmax