

# BIFACIAL MONO TOPCON HALF CELL MODULE

## SEMI+MBB

LNE5N108  
420-435 WATT



### HIGHER POWER DENSITY

- Output up to 435watt on 1.952M<sup>2</sup>
- Module efficiency high to 22.3%
- Gain more solar power per square meter



### SEMI+MBB

- Semi design deduce working temperature of operation and minimize hot-spot risk
- MBB design deduce cover of busbars and improve current collection ability on windy days
- Improve the output/watt



### ENHANCED MECHANICAL LOAD

- Wind load 2400 Pascal
- Snow load 5400 Pascal



### APPLIED UNDER STRICT CONDITIONS

- Modules could be applied under ammonia, salt mist, high temperature, high humidity condition



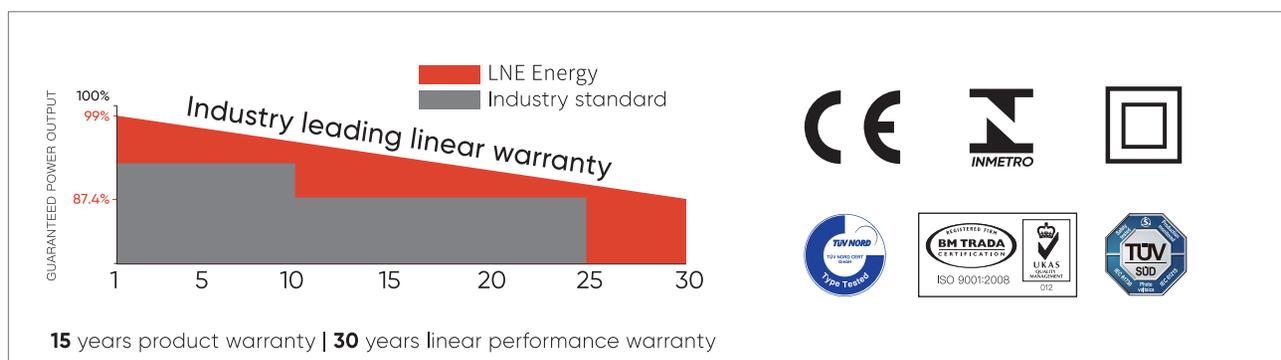
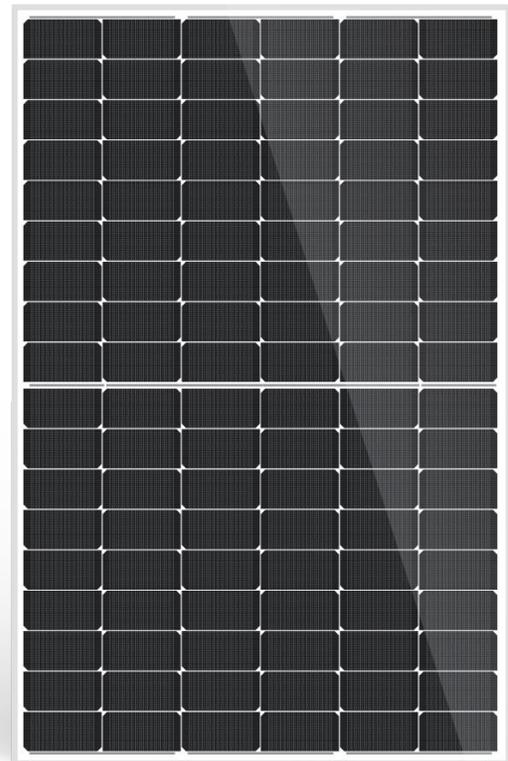
### IP68

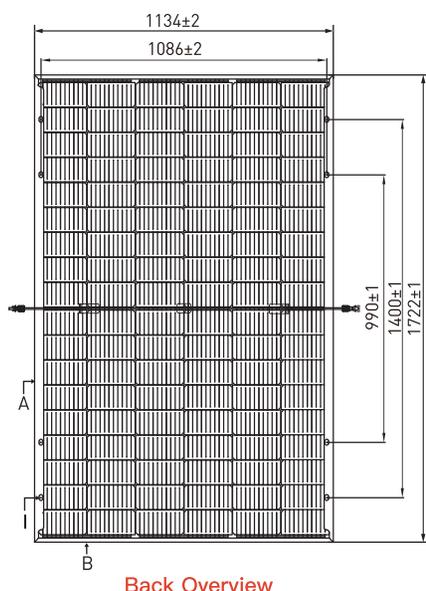
- IP68 junction boxes improve water-proof performance



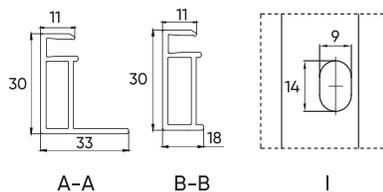
### EXCELLENT FIRE-PROOF PERFORMANCE

- Modules have passed anti-fire test

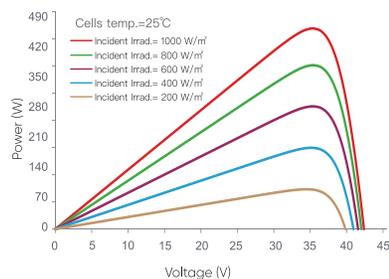
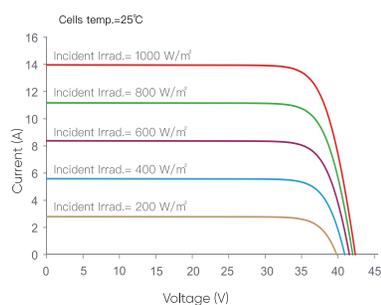




Back Overview



Current-Voltage & Power-Voltage Curves



### ELECTRICAL DATA (STC)

|                                |       |       |       |       |
|--------------------------------|-------|-------|-------|-------|
| Rated Power In Watts-Pmax (Wp) | 420   | 425   | 430   | 435   |
| Maximum Power Voltage-Vmpp (V) | 31.84 | 32.05 | 32.26 | 32.47 |
| Maximum Power Current-Impp (A) | 13.19 | 13.26 | 13.33 | 13.40 |
| Open Circuit Voltage-Voc (V)   | 38.04 | 38.23 | 38.42 | 38.61 |
| Short Circuit Current-Isc (A)  | 14    | 14.08 | 14.16 | 14.24 |
| Module Efficiency (%)          | 21.5% | 21.8% | 22.0% | 22.3% |

STC: Irradiation 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

### ELECTRICAL DATA (NMOT)

|                                |       |       |       |       |
|--------------------------------|-------|-------|-------|-------|
| Maximum Power-Pmax (Wp)        | 318   | 322   | 326   | 330   |
| Maximum Power Voltage-Vmpp (V) | 29.95 | 30.11 | 30.24 | 30.39 |
| Maximum Power Current-Impp (A) | 10.62 | 10.7  | 10.78 | 10.86 |
| Open Circuit Voltage-Voc (V)   | 36.2  | 36.38 | 36.56 | 36.74 |
| Short Circuit Current-Isc (A)  | 11.21 | 11.27 | 11.33 | 11.39 |

NOCT: Irradiation: 800 W/m<sup>2</sup>, ambient temperature: 20°C, air mass: 1.5, wind speed 1 m/s

### Electrical Characteristics With Different Rear Side Power Again (Reference To 435w Front)

|                                |       |       |       |       |       |
|--------------------------------|-------|-------|-------|-------|-------|
| Pmax gain (%)                  | 5%    | 10%   | 15%   | 20%   | 25%   |
| Maximum Power (Pmax/W)         | 457   | 479   | 500   | 522   | 544   |
| Maximum Power Voltage (Vmpp/V) | 32.47 | 32.47 | 32.47 | 32.47 | 32.47 |
| Maximum Power Current (Impp/A) | 14.07 | 14.74 | 15.41 | 16.08 | 16.75 |

### MECHANICAL CHARACTERISTICS

|                    |  |
|--------------------|--|
| Solar Cells        | Monocrystalline N-type, MBB                                    |
| Cell Configuration | 108 cells (6 x 9 x 2)  |
| Module Dimensions  | 1722 x 1134 x 30 mm  |
| Weight             | 22.0 kg  |
| Glass              | 1.6mm Tempered ARC Glass                                       |
| Back Sheet         | 1.6mm Glass  |
| Frame              | Anodized Aluminium Alloy, Silver                               |
| J-Box              | IP68, 3 bypass diodes  |
| Cables             | 4.0mm <sup>2</sup> , (+) 380mm, (-) 380mm or customized length |
| Connector          | MC4 Compatible   |

### TEMPERATURE & MAXIMUM RATINGS

|   |             |
|---|-------------|
| Nominal Module Operating Temperature (NMOT) | 44±2°C      |
| Temperature Coefficient of Voc              | -0.25% / °C |
| Temperature Coefficient of Isc              | 0.045% / °C |
| Temperature Coefficient of Pmax             | -0.30% / °C |
| Operational Temperature                     | -40°C~+85°C |
| Maximum System Voltage                      | 1500VDC     |
| Max Series Fuse Rating                      | 25A         |

### PACKAGING

|                                 |           |
|---------------------------------|-----------|
|                                 | 40FT (HQ) |
| Number of Modules Per Container | 936       |
| Number of Modules Per Pallet    | 36        |
| Number of Pallets Per Container | 26        |