

# AURO<sup>N</sup>

N-Type Topcon Bifacial Module

**380-400W** **NLBK-24**

## Key Product Features



### Light transmission

Modules 5%-40% transmittance  
Suitable for scenarios with light transmission



### Zero LID

N-Type wafer No B-O caused LID  
Excellent LID resistance performance



### PID Resistant

Optimize cell production technology and material control. Enhance PID Resistant performance, and reduce degradation



### Excellent low-light performance

Better low-light power generation performance in low radiation environment such as haze and cloudy days



### SMBB Technology

16BB has better light trapping and current collection to improve module power output



### Bifacial design

Double-sided power generation  
Power gain up to 5%~32%



### Low temperature coefficient

Peak power temperature coefficient  
Excellent power generation performance in high temperature environment



### LOW LOCE (Levelized Cost of Energy)

Reduce the cost of BOS efficiently  
Increase return on project investment

## Comprehensive product certification

- IEC61215-1(ed.1)
- IEC61215-1-1(ed.1)
- IEC61215-2(ed.1)
- IEC61730-1(ed.2)
- IEC61730-2(ed.1)
- UL 61730-1 1<sup>st</sup> Edition
- UL 61730-2 1<sup>st</sup> Edition

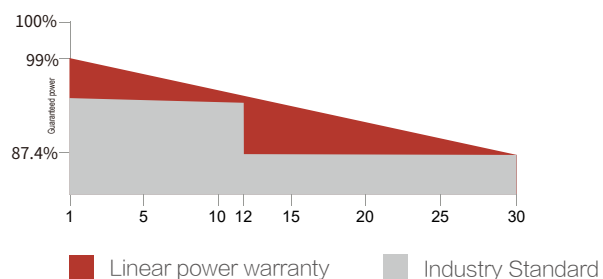


## Industry-leading Quality Assurance

**12** year  
Product warranty

**30** year  
linear power warranty

**-0.40%**  
Annual degradation



● Please refer to the warranty letter for details



### Electrical Data(STC\*)

|                                 |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|
| Module Type: NLBK-24            | 380   | 385   | 390   | 395   | 400   |
| Rate Maximum Power(Pmax)(W)     | 380   | 385   | 390   | 395   | 400   |
| Open Circuit Voltage(Voc) (V)   | 33.83 | 33.97 | 34.11 | 34.25 | 34.39 |
| Short Circuit Current(Isc) (A)  | 14.31 | 14.43 | 14.55 | 14.67 | 14.79 |
| Maximum Power Voltage(Vmp)(V)   | 28.05 | 28.19 | 28.34 | 28.48 | 28.63 |
| Maximum Power Current (Imp) (A) | 13.55 | 13.66 | 13.77 | 13.88 | 13.99 |
| Module Efficiency (%)           | 14.71 | 14.90 | 15.10 | 15.29 | 15.48 |

\*Standard Test Conditions (STC) : irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C

### Electrical Data(NMOT\*)

|                                 |       |       |       |       |       |
|---------------------------------|-------|-------|-------|-------|-------|
| Module Type: NLBK-24            | 380   | 385   | 390   | 395   | 400   |
| Rate Maximum Power(Pmax)(W)     | 284.8 | 288.5 | 293.6 | 297.5 | 301.4 |
| Open Circuit Voltage(Voc) (V)   | 31.8  | 32.0  | 32.1  | 32.2  | 32.4  |
| Short Circuit Current(Isc) (A)  | 11.55 | 11.65 | 11.75 | 11.84 | 11.94 |
| Maximum Power Voltage(Vmp)(V)   | 26.2  | 26.3  | 26.4  | 26.6  | 26.7  |
| Maximum Power Current (Imp) (A) | 10.86 | 10.96 | 11.11 | 11.20 | 11.30 |

\*Nominal Module Operating Temperature (NMOT):irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

### Operational Parameter

|   |             |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|
| Operating Temperature                       | -40°C~+85°C |       |       |       |       |       |
| NMOT (Nominal Module Operating Temperature) | 45±2°C      |       |       |       |       |       |
| Maximum System Voltage(V)                   | 1500V DC    |       |       |       |       |       |
| Maximun Fuse Current Rating(A)              | 30A         |       |       |       |       |       |
| Fire Safety                                 | Class C     |       |       |       |       |       |
| Power Tolerance                             | 0~+5W       |       |       |       |       |       |
| Bifacial Factor                             | 80±5%       |       |       |       |       |       |
| PG. 400W                                    | 5%          | 10%   | 15%   | 20%   | 25%   | 30%   |
| Rate Maximum Power(Pmax)(W)                 | 420         | 440   | 460   | 480   | 500   | 520   |
| Open Circuit Voltage(Voc) (V)               | 34.39       | 34.39 | 34.39 | 34.39 | 34.39 | 34.39 |
| Short Circuit Current (Isc) (A)             | 15.53       | 16.27 | 17.01 | 17.75 | 18.49 | 19.23 |
| Maximum Power Voltage(Vmp)(V)               | 28.63       | 28.63 | 28.63 | 28.63 | 28.63 | 28.63 |
| Maximum Power Current(Imp) (A)              | 14.69       | 15.39 | 16.09 | 16.79 | 17.49 | 18.19 |

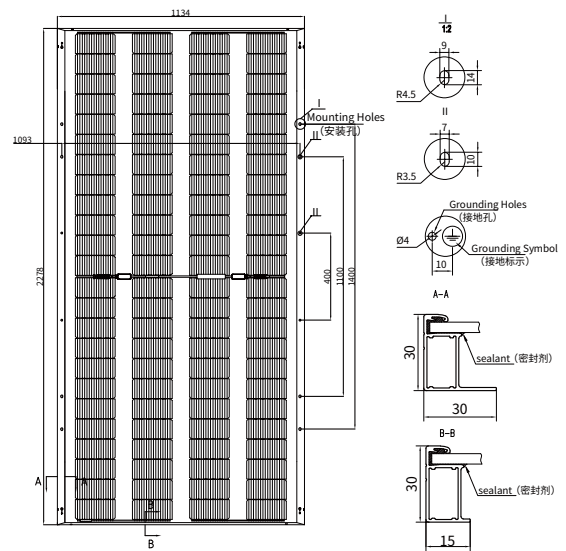
### Mechanical Properties

|                     |  |  |
|---------------------|--|--|
| Cell Type           | N - type Mono-crystalline                                  |  |
| Number of Cells     | 96   |  |
| Dimension of Module | 2278*1134*30mm   |  |
| Weight              | 30.0kg±5%  |  |
| Front Glass         | 2.0mm semi-tempered glass with AR Coating                  |  |
| Back Glass          | 2.0mm semi-tempered grid printing glass                    |  |
| Frame               | Anodized aluminum alloy                                    |  |
| Junction Box        | IP68(3 Diodes)   |  |
| Cable Length        | +320mm , -260mm(4.0mm <sup>2</sup> ); or Customized Length |  |
| Packing Information | 720(36*20)pcs per 40'HQ                                    |  |

### Temperature Coefficient

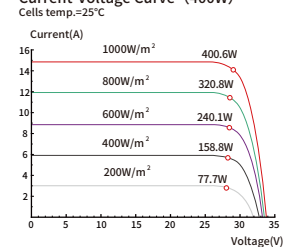
|   |           |
|---|-----------|
| Peak Power Temperature Coefficient            | -0.30%/°C |
| Open-Circuit Voltage Temperature Coefficient  | -0.25%/°C |
| Short-Circuit Current Temperature Coefficient | 0.046%/°C |

### Drawing



### I-V curve

Current-Voltage Curve (400W)



Power-Voltage Curve (400W)

