

AURO^N

N-Type TOPCon Bifacial Module

425-450W **NLBK-27**

Key Product Features



High conversion efficiency
Modules efficiency up to 23.04%



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



High compatibility
Excellent system compatibility
Adapt to mainstream inverter and tracker



SMBB Technology
16BB, Better light trapping and current collection capability to improve module power output



Zero LID
Excellent LID resistance performance, achieving Zero LID



Weather resistance
Excellent resistance to Salt Mist, Dust and Sandy, Ammonia corrosion and other harsh environments
Wider range of application



Low LCOE
Significantly decrease BOS costs
Improve project return on investment



Low temperature coefficient
Peak power temperature coefficient $-0.30\%/^{\circ}\text{C}$
Excellent power generation performance in high temperature environment

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 1st Edition
- UL 61730-2 1st Edition

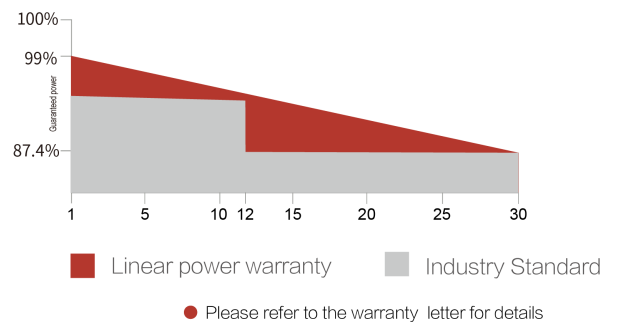


Industry-leading Quality Assurance

12 year
Product warranty

30 year
linear power warranty

-0.40%
Annual degradation



Electrical Data(STC*)

Module Type: NLBK-27	425	430	435	440	445	450
Rate Maximum Power(Pmax)(W)	425	430	435	440	445	450
Open Circuit Voltage(Voc) (V)	38.75	38.95	39.16	39.38	39.59	39.80
Short Circuit Current(Isc) (A)	13.66	13.73	13.80	13.86	13.93	14.00
Maximum Power Voltage(Vmp)(V)	32.18	32.38	32.59	32.81	33.02	33.23
Maximum Power Current (Imp) (A)	13.21	13.28	13.35	13.41	13.48	13.55
Module Efficiency (%)	21.76	22.02	22.28	22.53	22.79	23.04

*Standard Test Conditions (STC) : irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C

Electrical Data(NMOT*)

Module Type: NLBK-27	425	430	435	440	445	450
Rate Maximum Power(Pmax)(W)	320.3	323.9	327.7	331.3	335.1	338.9
Open Circuit Voltage(Voc) (V)	36.4	36.6	36.8	37.0	37.2	37.4
Short Circuit Current(Isc) (A)	11.03	11.09	11.14	11.19	11.25	11.31
Maximum Power Voltage(Vmp)(V)	30.5	30.7	30.9	31.1	31.3	31.5
Maximum Power Current (Imp) (A)	10.48	10.54	10.60	10.65	10.70	10.76

*Nominal Module Operating Temperature (NMOT):irradiance of 800 W/m², 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. 440W	5%	10%	15%	20%	25%	30%
Rate Maximum Power(Pmax) (W)	473	495	518	540	563	585
Open Circuit Voltage(Voc) (V)	39.8	39.8	39.8	39.8	39.8	39.8
Short Circuit Current (Isc) (A)	14.70	15.40	16.10	16.80	17.50	18.20
Maximum Power Voltage(Vmp)(V)	33.23	33.23	33.23	33.23	33.23	33.23
Maximum Power Current(Imp) (A)	14.23	14.91	15.58	16.26	16.94	17.62

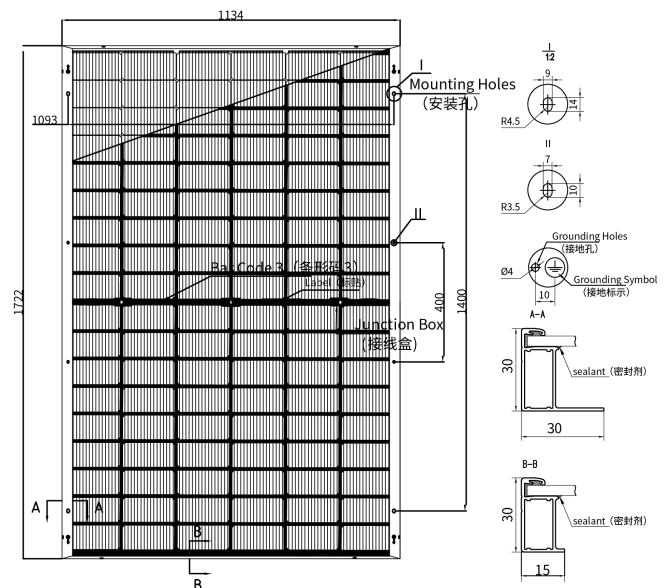
Mechanical Properties

Cell Type	N - type Mono-crystalline
Number of Cells	108
Dimension of Module	1722*1134*30mm
Weight	22.90Kg ± 5%
Front Glass	2.0mm 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 ²) ; or Customized Length
Packing Information	936 (36*26)pcs per 40'HQ

Temperature Coefficient

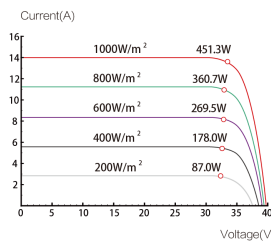
Peak Power Temperature Coefficient	-0.30%/°C
Open-Circuit Voltage Temperature Coefficient	-0.25%/°C
Short-Circuit Current Temperature Coefficient	0.046%/°C

Drawing



I-V curve

Current-Voltage Curve (450W)
Cells temp.=25°C



Power-Voltage Curve (450W)
Cells temp.=25°C

