

AURO^N

N-Type TOPCon Bifacial Module

420-450W **NLBK-27**

Key Product Features



High power output

Module efficiency increases to 23.04%



Bifacial power generation

Both sides absorb sunlight to generate power
5%-32% power generation gain



Excellent low-light performance

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



Zero LID

Excellent antidegradation capability
to achieve zero LID



SMBB Technology

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



PID Resistance

Excellent Anti-PID Performance guarantee via optimized
production technology and materials control



Low temperature coefficient

Peak power temperature coefficient $-0.278\%/^{\circ}\text{C}$
Excellent power generation performance in high
temperature environment



LOW LCOE (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 1st Edition
- UL 61730-2 1st Edition

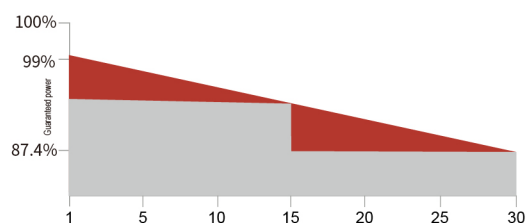


15 year
Product warranty

30 year
linear power warranty

-0.40%
Annual degradation

Industry-leading Quality Assurance



■ Linear power warranty ■ Industry Standard

● Please refer to the warranty letter for details



Solar Power



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Electrical Data(STC*)

Module Type: NLBK-27	420	425	430	435	440	445	450
Rate Maximum Power(Pmax)(W)	420	425	430	435	440	445	450
Open Circuit Voltage(Voc) (V)	38.57	38.88	39.19	39.51	40.31	40.45	40.59
Short Circuit Current(Isc) (A)	13.61	13.69	13.77	13.85	13.49	13.59	13.69
Maximum Power Voltage(Vmp)(V)	31.89	32.08	32.26	32.44	33.74	33.87	33.99
Maximum Power Current (Imp) (A)	13.17	13.25	13.33	13.41	13.04	13.14	13.24
Module Efficiency (%)	21.51	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	420	425	430	435	440	445	450
Rate Maximum Power(Pmax)(W)	318.2	322.1	326.0	329.9	332.4	336.3	340
Open Circuit Voltage(Voc) (V)	36.5	36.8	37.0	37.3	38.1	38.2	38.3
Short Circuit Current(Isc) (A)	10.98	11.05	11.11	11.18	10.89	10.97	11.05
Maximum Power Voltage(Vmp)(V)	30.5	30.7	30.9	31.1	32.1	32.2	32.3
Maximum Power Current (Imp) (A)	10.44	10.50	10.56	10.61	10.37	10.45	10.53

*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.435W	5%	10%	15%	20%	25%	30%
Rate Maximum Power(Pmax)(W)	473	495	518	540	563	585
Open Circuit Voltage(Voc) (V)	40.59	40.59	40.59	40.59	40.59	40.59
Short Circuit Current (Isc) (A)	14.37	15.06	15.74	16.43	17.11	17.80
Maximum Power Voltage(Vmp)(V)	33.99	33.99	33.99	33.99	33.99	33.99
Maximum Power Current(Imp) (A)	13.90	14.56	15.23	15.89	16.55	17.21

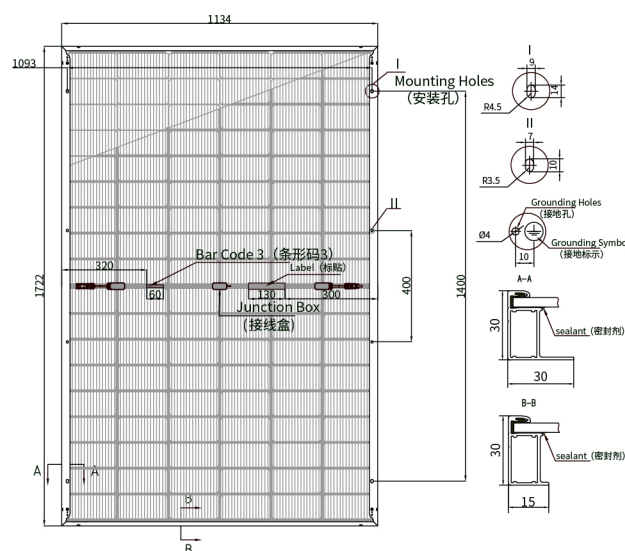
Mechanical Properties

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

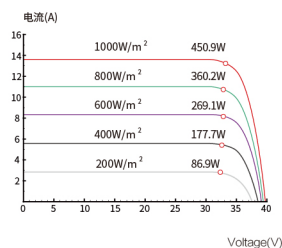
Peak Power Temperature Coefficient	-0.278%/°C
Open-Circuit Voltage Temperature Coefficient	-0.239%/°C
Short-Circuit Current Temperature Coefficient	0.044%/°C

Drawing



I-V curve

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



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

