

AURO^N

N-Type TOPCon Bifacial Module

465-490W **NLBK-30**

Key Product Features



High power output

Module efficiency increases to 22.65%



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

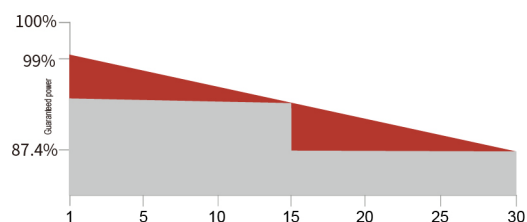


Industry-leading Quality Assurance

15 year
Product warranty

30 year
linear power warranty

-0.40%
Annual degradation



■ Linear power warranty ■ Industry Standard

● Please refer to the warranty letter for details



Solar Power



<https://solar.byd.com/en/>

+86-755-89888888

bydpv@byd.com

Electrical Data(STC*)

Module Type: NLBK-30	465	470	475	480	485	490
Rate Maximum Power(Pmax)(W)	465	470	475	480	485	490
Open Circuit Voltage(Voc) (V)	42.65	42.96	43.27	43.58	44.69	44.79
Short Circuit Current(Isc) (A)	13.51	13.59	13.67	13.75	13.41	13.49
Maximum Power Voltage(Vmp)(V)	35.55	35.74	35.93	36.12	37.51	37.66
Maximum Power Current (Imp) (A)	13.08	13.15	13.22	13.29	12.93	13.01
Module Efficiency (%)	21.49	21.72	21.95	22.18	22.42	22.65

*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-30	465	470	475	480	485	490
Rate Maximum Power(Pmax)(W)	351.7	355.7	359.6	363.5	366.2	369.8
Open Circuit Voltage(Voc) (V)	40.3	40.6	40.9	41.2	42.2	42.3
Short Circuit Current(Isc) (A)	10.90	10.97	11.03	11.10	10.82	10.89
Maximum Power Voltage(Vmp)(V)	33.9	34.1	34.3	34.5	35.5	35.7
Maximum Power Current (Imp) (A)	10.38	10.44	10.49	10.54	10.31	10.37

*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				
Maximum Fuse Current Rating(A)	30A				
Fire Safety	Class C				
Power Tolerance	0~+5W				
Bifacial Factor	80±5%				
PG. 480W	5%	10%	15%	20%	25%
Rate Maximum Power(Pmax)(W)	504	528	552	576	600
Open Circuit Voltage(Voc) (V)	43.58	43.58	43.58	43.58	43.58
Short Circuit Current (Isc) (A)	14.44	15.13	15.81	16.50	17.19
Maximum Power Voltage(Vmp)(V)	36.12	36.12	36.12	36.12	36.12
Maximum Power Current(Imp) (A)	13.95	14.62	15.28	15.95	16.61

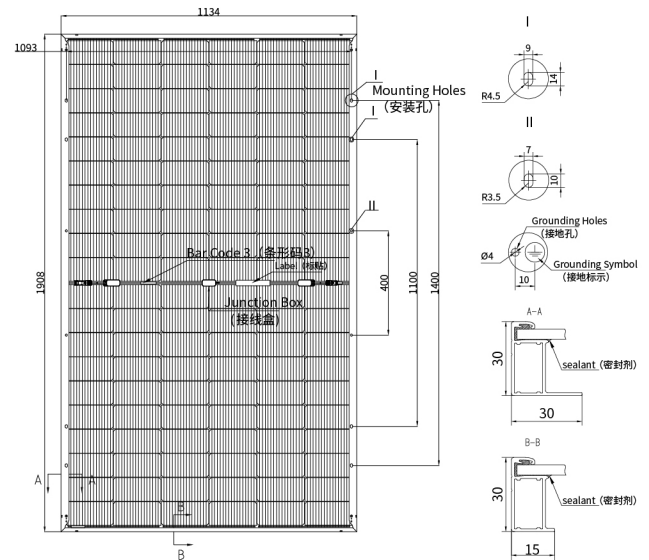
Mechanical Properties

Cell Type	N - type Mono-crystalline
Number of Cells	120
Dimension of Module	1908*1134*30mm
Weight	25.2Kg±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	864(36*24)pcs per 40'HQ

Temperature Coefficient

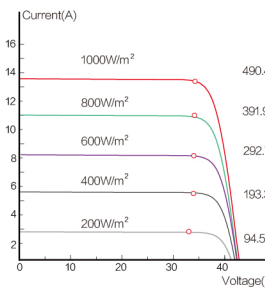
Peak Power Temperature Coefficient	-0.278%/°C
Open-Circuit Voltage Temperature Coefficient	-0.239%/°C
Short-Circuit Current Temperature Coefficient	0.044%/°C

Drawing



I-V curve

Current-Voltage Curve (490W)
Cells temp.=25°C



Power-Voltage Curve (490W)
Cells temp.=25°C

