## WP-HD108N

## 405-425W



N-type Bifacial High Efficiency Mono Silicon Half-Cell Double Glass Module

N TOPCon Module

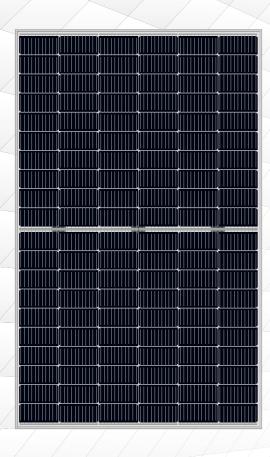
Maximum Power Output

**Power Output Tolerance** 

108CELL

21.69%

 $0 \sim +5 W$ 





#### **More Power Gain**

30 Years guaranteed product life allows extra 10-30% power output;



#### LID-FREE (Light induced Degradation)

No LID issue naturally with WattPower N-type cells technology;



#### **Lower LCOE**

BOS cost saving with high power class and 1500V system voltage



#### **Excellent Weak Light Performance**

Better performing in weak light conditions such as cloudy days



#### **Better Temperature Coefficient**

More power generation with leading passivating contact cell technology









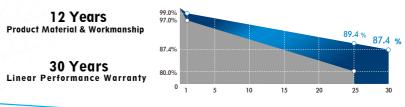
#### IEC61215,IEC61730

ISO 9001:2015 Quality management sysytem

ISO 14001 Standards for environment management system

OHSAS 18001 International standards for occupational health & safety

#### **Linear Performance Warranty**



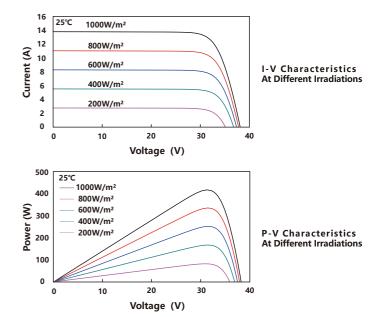
N-type Bifacial Double Glass Module Linear Performance Warranty

### WP-HD108N

#### Engineering Drawing (unit: mm)

# A Long Frame -@ **B** Short Frame C Mounting Hole

#### Characteristic Curves HD108N-415



#### **Electrical Properties STC\***

Testing Condition	Front Side				
Peak Power (Pmax) (W)	405	410	415	420	425
MPP Voltage (Vmp) (V)	31.3	31.5	31.7	31.9	32.1
MPP Current (Imp) (A)	12.95	13.02	13.10	13.17	13.24
Open Circuit Voltage (Voc) (V)	37.3	37.5	37.7	37.9	38.1
Short Circuit Current (Isc) (A)	13.75	13.82	13.91	13.98	14.05
Module Efficiency (%)	20.67	20.92	21.18	21.43	21.69

#### **Electrical Properties NOCT\***

Testing Condition	Front Side				
Peak Power (Pmax) (W)	306	310	314	318	322
MPP Voltage (Vmp) (V)	29.3	29.5	29.7	29.9	30.1
MPP Current (Imp) (A)	10.44	10.50	10.56	10.62	10.67
Open Circuit Voltage (Voc) (V)	35.7	35.8	36.0	36.2	36.4
Short Circuit Current (Isc) (A)	11.09	11.14	11.22	11.27	11.33

<sup>\*</sup>NOCT: Irradiance at 800 W/m2, Ambient Temperature 20°C, Wind Speed 1 m/s

#### With Different Power Generation Gain (regarding 415W as an example)

Power Gain (%)	Peak Power (Pmax) (W)	MPP Voltage (Vmp) (V)	MPP Current (Imp) (A)	Open Circuit Voltage (Voc) (V)	Short Circuit Current (Isc) (A)
10	446	31.7	14.07	37.7	14.93
15	462	31.7	14.55	37.7	15.43
20	477	31.7	15.04	37.7	15.94
25	493	31.7	15.52	37.7	16.45
30	508	31.8	16.01	37.8	16.96

#### **Operating Properties**

Operating Temperature (°C)	-40°C∼+85°C
Maximum System Voltage (V)	1500V (IEC)
Maximum Series Fuse Rating(A)	30
Power Tolerance	0~+5W
Bifaciality*	75%
*Rifaciality_Dmayroar (STC) /Dmayfront (STC)	Rifaciality tolorance: +5%

#### **Temperature Coefficient**

Temperature Coefficient of Pmax*	-0.320%/℃
Temperature Coefficient of Voc	-0.260%/℃
Temperature Coefficient of Isc	+0.046%/°C
Nominal Operating Cell Temperature (NOCT)	42±2℃

<sup>\*</sup>Temperature Coefficient of Pmax±0.03%/°C

#### **Mechanical Properties**

Cell Type	182.00mm*91.00mm
Number of Cells	108pcs(12*9)
Dimension	1728mm*1134mm*30mm
Weight	24.5kg
Front /Rear Glass*	2.0mm/2.0mm
Frame	Anodized Aluminium
Junction Box	IP68 (3 diodes)
Length of Cable*	4.0mm <sup>2</sup> , +300mm/-180mm
Connector	MC4 Compatible

<sup>\*</sup>Heat strengthened glass \*Cable length can be cus tomized

Packaging Configuration	
Packing Type	40'HQ
Piece/Pallet	36
Piece/Container	936

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 $<sup>^{*}</sup>$  STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM1.5 The data above is for reference only and the actual data is in accordance with the pratical testing