

**DBB**


# DHN-60R20/DG/FS-520W

Full-Screen Double Glass PV Module

## Comprehensive Products & System Certificates

IEC 61215 / IEC 61730 / CE / INMETRO  
ISO 45001  
2018/International standards for occupational health & safety  
ISO 14001  
2015/Standards for environmental management system  
ISO 9001  
2015/Quality management system

 Material & technology warranty

 Linear power output warranty



Frameless design, installable both vertically & horizontally,  
No water, no dust, snow slide fast, power generation increased by 6-15%



No-Busbar(OBB) Technology, shorten 40% of the transmission distance.  
Reduces losses & improving conversion efficiency



TOPCon cells double-sided rate up to 85% and  
more back power generation by 5-25%



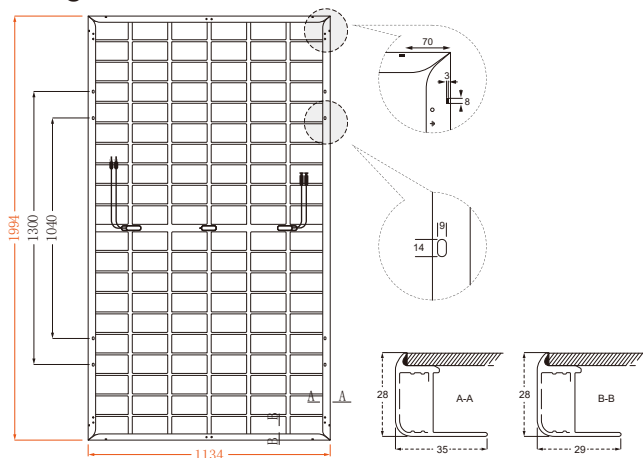
Double-glass Technology,  
higher encapsulation blocking and mechanical strength



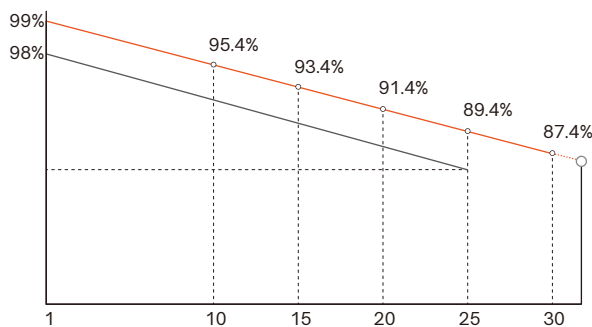
Higher power, longer service life, linear power warranty for 30 years

# DHN-60R20/DG/FS-520W

## Design



## 30-Year Linear Power Output Warranty



— DAH Solar linear power output guarantee  
— Standard linear power output guarantee

## Mechanical Specification

|                   |                           |
|-------------------|---------------------------|
| No. of Cells      | 120 (6×20)                |
| Weight            | 27.2kg                    |
| Cells Type        | N-type 182×95.8mm         |
| Dimension (L×W×T) | 1994×1134×28mm            |
| Packing           | 38pcs/pallet, 836pcs/40HQ |

|              |   |
|--------------|---|
| Cable        | 4.0mm <sup>2</sup> , 300/200mm in length, length can be customized        |
| Glass        | 2.0mm High Transmission, Antireflection Coating                           |
| Junction Box | IP68, 3 Bypass Diodes   |
| Connector    | PV5e, Changshu Friends Connector Technology Co.,Ltd Customized Connectors |

## Electrical Characteristics

| Module Type                                | DHN-60R20/DG/FS-520W |       |
|--|----------------------|-------|
|  | STC                  | Noct  |
| Test conditions                            | STC                  | Noct  |
| Maximum Power (P <sub>max</sub> /W)        | 520                  | 391   |
| Open-circuit Voltage (V <sub>oc</sub> /V)  | 44.5                 | 42.3  |
| Maximum Power Voltage (V <sub>mp</sub> /V) | 37.9                 | 36.0  |
| Short-circuit Current (I <sub>sc</sub> /A) | 14.72                | 11.88 |
| Maximum Power Current (I <sub>mp</sub> /A) | 13.72                | 10.86 |
| Module Efficiency (%)                      | 23.00%               |       |
| Refer Bifacial Factor                      | 80±5%                |       |

STC-Standard Test Environment: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, Spectrum AM1.5 Tolerance: P<sub>max</sub>=±3%, V<sub>oc</sub>=±3%, I<sub>sc</sub>=±3%  
 NOC-Standard Test Environment: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s

## Electrical ratings at irradiance level at BNPI

|  |       |
|--|-------|
| Rated V <sub>oc</sub> at STC (V) / tolerance ±3% | 44.7  |
| Rated I <sub>sc</sub> at STC (A) / tolerance ±3% | 16.21 |
| Rated V <sub>mp</sub> at STC (V)                 | 38.1  |
| Rated I <sub>mp</sub> at STC (A)                 | 15.09 |
| Rated P <sub>max</sub> at STC (W) / tolerance±3% | 575   |

Bifaciality coefficient with tolerance: φ<sub>Isc</sub> = 80%±5%, φ<sub>Voc</sub> = 98%±2%, φ<sub>Pmax</sub> = 80%±5%

## Electrical ratings at irradiance level at aBSI

|   |       |
|---|-------|
| Rated I <sub>sc</sub> at aBSI (A) / tolerance ±3% | 18.03 |
|---|-------|

## Operating Parameters

|                                    |             |
|------------------------------------|-------------|
| Maximum System Voltage             | 1500V DC    |
| Operating Temperature              | -40 ~ +85°C |
| Maximum Series Fuse Rating         | 30A         |
| Nominal Operating Cell Temperature | 45°C±2°C    |
| Application Level                  | Class A     |
| Power sorting tolerance            | 0 ~ 5W      |

## Temperature Coefficient

|   |               |
|---|---------------|
| Temperature Coefficient of I <sub>sc</sub> (α <sub>Isc</sub> )  | 0.046%/°C     |
| Temperature Coefficient of V <sub>oc</sub> (β <sub>Voc</sub> )  | -0.25%/°C     |
| Temperature Coefficient of P <sub>max</sub> (γ <sub>Pmp</sub> ) | -0.29%/°C     |
| Fire class  | CLASS A       |
| Snow load, frontside / Wind load, backside                      | 5400Pa/2400Pa |