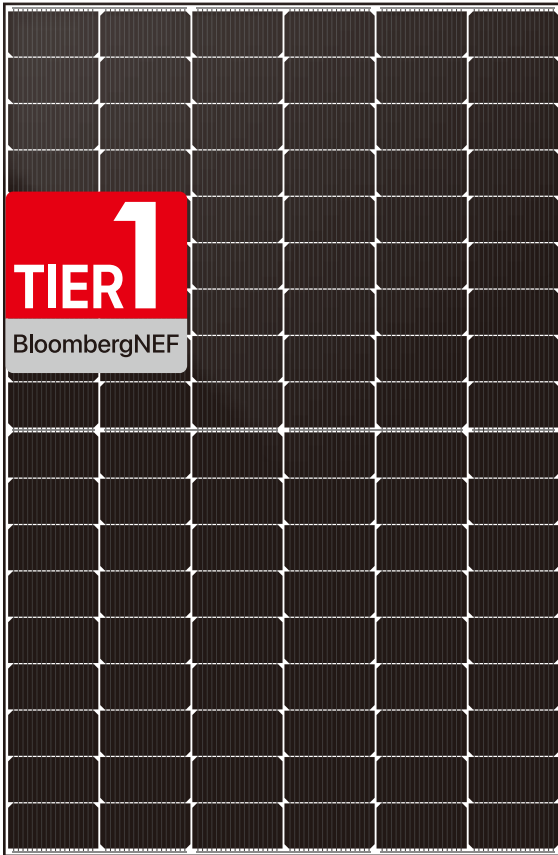




# TOPCon

DHN-54R18/DG(BW)

0~+5W

## 445~465W



### Higher Power Generation Efficiency

N-type TOPCon module could increase power generation by 3%+ per watt compared with PERC module



### Higher Power Output

Bifacial module with dual glass back-side power increases 5-25%



### Lower Degradation Rate, PID Resistance

First-year ≤1%, 2-30 year ≤0.4%; excellent Anti-PID performance



### Lower Temp. Coefficient

More power generation under high-temperature



### Better Dim Light Performance

Excellent performance under dim light

## 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

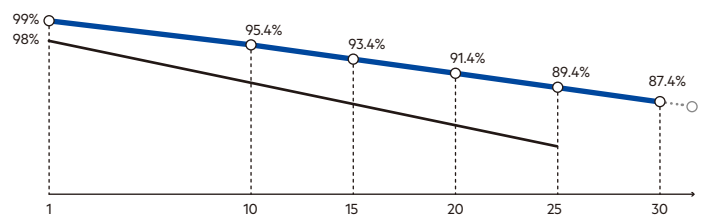
ISO 9001: 2015/Quality management system



## Quality Guarantee

15-Year Material & Technology Warranty

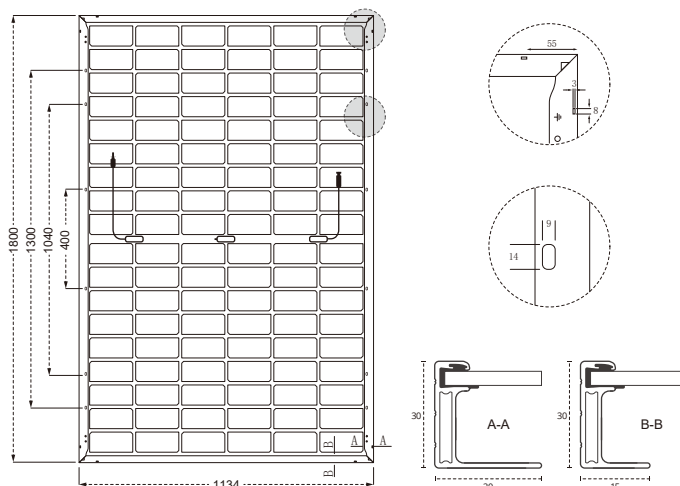
30-Year Linear Power Output Warranty



▲ DAH Solar Linear power output guarantee    ▲ Standard Linear power output guarantee

## Mechanical Specification

|                   |                                                                    |
|-------------------|--------------------------------------------------------------------|
| Cable             | 4.0mm <sup>2</sup> , 350/250mm in length,<br>(Including Connector) |
| No.of Cells       | 108 (6×18)                                                         |
| Glass             | 2.0mm High Transmission, Antireflection Coating                    |
| Junction Box      | IP68, 3 Bypass Diodes                                              |
| Connector         | MC4 Compatible                                                     |
| Weight            | 25.4kg                                                             |
| Cells Type        | N-type 182×95.8mm                                                  |
| Dimension (L×W×T) | 1800×1134×30mm                                                     |
| Packing           | 36pcs/Pallet, 864pcs/40HQ                                          |



## Electrical Characteristics

| Module Type                 | DHN-54R18/DG(BW) |       |        |       |        |       |        |       |        |       |
|-----------------------------|------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                             | STC              | NOCT  | STC    | NOCT  | STC    | NOCT  | STC    | NOCT  | STC    | NOCT  |
| Maximum Power (Pmax)        | 445              | 335   | 450    | 338   | 455    | 342   | 460    | 346   | 465    | 350   |
| Open-circuit Voltage (Voc)  | 39.2             | 37.2  | 39.4   | 37.4  | 39.6   | 37.6  | 39.8   | 37.8  | 40.0   | 38.0  |
| Maximum Power Voltage (Vmp) | 33.3             | 31.6  | 33.5   | 31.8  | 33.7   | 32.0  | 33.9   | 32.2  | 34.1   | 32.4  |
| Short-Circuit Current (Isc) | 14.36            | 11.59 | 14.42  | 11.64 | 14.48  | 11.69 | 14.54  | 11.74 | 14.60  | 11.79 |
| Maximum Power Current (Imp) | 13.36            | 10.58 | 13.43  | 10.63 | 13.50  | 10.69 | 13.57  | 10.74 | 13.64  | 10.79 |
| Module Efficiency (STC)     | 21.80%           |       | 22.05% |       | 22.29% |       | 22.54% |       | 22.78% |       |
| Refer Bifacial Factor       | 80±5%            |       |        |       |        |       |        |       |        |       |

STC: Standard Test Environment : Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, Spectrum AM1.5

NOCT: Standard Test Environment : Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s

## Double-Sided Power Generation Parameters (Rear gain)

|     |                       |       |       |       |       |       |
|-----|-----------------------|-------|-------|-------|-------|-------|
| 5%  | Maximum Power (Pmax)  | 467   | 473   | 478   | 483   | 488   |
|     | Module Efficiency (%) | 22.9  | 23.1  | 23.4  | 23.7  | 23.9  |
| 15% | Maximum Power (Pmax)  | 511.8 | 517.5 | 523.3 | 529.0 | 534.8 |
|     | Module Efficiency (%) | 25.1  | 25.4  | 25.6  | 25.9  | 26.2  |
| 25% | Maximum Power (Pmax)  | 556.3 | 562.5 | 568.8 | 575.0 | 581.3 |
|     | Module Efficiency (%) | 27.3  | 27.6  | 27.9  | 28.2  | 28.5  |

## Operating Parameters

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

## Temperature Coefficient

|                                           |           |
|-------------------------------------------|-----------|
| Temperature Coefficient of Isc ( α Isc )  | 0.046%/°C |
| Temperature Coefficient of Voc ( β Voc )  | -0.25%/°C |
| Temperature Coefficient of Pmax ( γ Pmp ) | -0.30%/°C |

## Mechanical Loads

|                                            |               |
|--------------------------------------------|---------------|
| Snow load, frontside / Wind load, backside | 5400Pa/2400Pa |
|--------------------------------------------|---------------|

## I-V Curve

