

# DHN-54X16/DG(BB) 430~435W

High Efficiency 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



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 performance in anti hidden cracking, acid  
and alkali, salt spray, water vapor, UV, PID



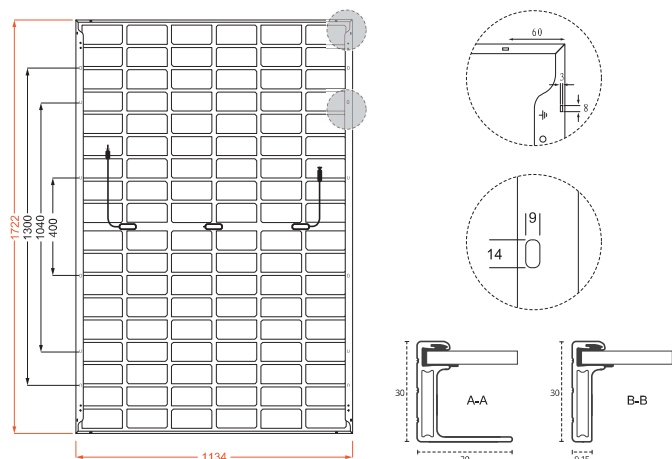
TOPCon cells, lower attenuation,  
better temperature coefficient & dim light performance



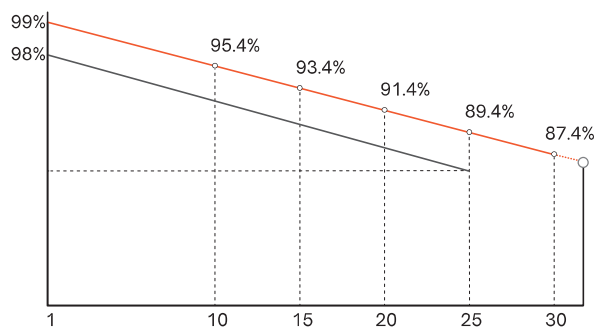
LECO laser assisted sintering technology,  
reduces contact resistance and improves efficiency by 0.2% -0.5%

# DHN-54X16/DG(BB) 430~435W

## Design



## 30-Year Linear Power Output Warranty



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

## Mechanical Specification

|                   |                           |
|-------------------|---------------------------|
| No. of Cells      | 108 (6×18)                |
| Weight            | 23.5kg                    |
| Cells Type        | N-type 182×91mm           |
| Dimension (L×W×T) | 1722×1134×30mm            |
| Packing           | 36pcs/Pallet, 936pcs/40HQ |

|              |                                                                                             |
|--------------|---------------------------------------------------------------------------------------------|
| Cable        | 4.0mm <sup>2</sup> , 300/200mm in length,<br>(Including connector) length can be customized |
| Glass        | 2.0mm High Transmission, Antireflection Coating                                             |
| Junction Box | IP68, 3 Bypass Diodes                                                                       |
| Connector    | MC4 Compatible                                                                              |

## Electrical Characteristics

| Module Type                   | DHN-54X16/DG(BB) |       |        |       |
|-------------------------------|------------------|-------|--------|-------|
| Test conditions               | STC              | NOCT  | STC    | NOCT  |
| Maximum Power (Pmax/W)        | 430              | 323   | 435    | 327   |
| Open-circuit Voltage (Voc/V)  | 38.0             | 36.10 | 38.2   | 36.29 |
| Maximum Power Voltage (Vmp/V) | 32.5             | 30.88 | 32.7   | 31.07 |
| Short-circuit Current (Isc/A) | 13.84            | 11.17 | 13.90  | 11.22 |
| Maximum Power Current (Imp/A) | 13.23            | 10.47 | 13.30  | 10.53 |
| Module Efficiency (STC)       | 22.02%           |       | 22.28% |       |
| 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 (P <sub>max</sub> ) | 452   | 457   |
|     | Module Efficiency (%)             | 23.12 | 23.39 |
| 15% | Maximum Power (P <sub>max</sub> ) | 495   | 500   |
|     | Module Efficiency (%)             | 25.32 | 25.62 |
| 25% | Maximum Power (P <sub>max</sub> ) | 538   | 544   |
|     | Module Efficiency (%)             | 27.53 | 27.85 |

## 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     |

## Temperature Coefficient

|                                                                 |               |
|-----------------------------------------------------------------|---------------|
| Temperature Coefficient of I <sub>sc</sub> (ΔI <sub>sc</sub> )  | 0.046%/°C     |
| Temperature Coefficient of V <sub>oc</sub> (ΔV <sub>oc</sub> )  | -0.25%/°C     |
| Temperature Coefficient of P <sub>max</sub> (ΔP <sub>mp</sub> ) | -0.29%/°C     |
| Snow load, frontside / Wind load, backside                      | 5400Pa/2400Pa |