

DBB

DHN-54R20/FS 450~470W

Full-Screen Single 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



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



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



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

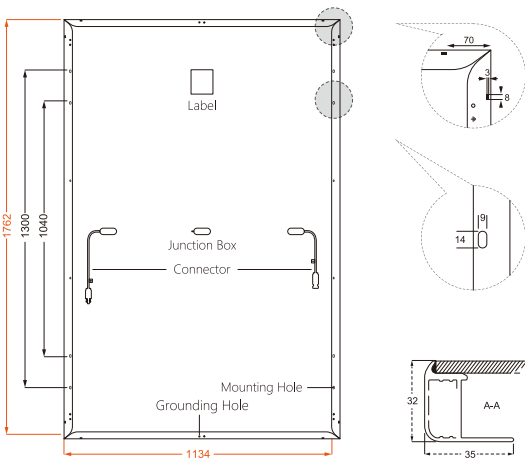


TOPCon cells, lower attenuation,
better temperature coefficient & dim light performance

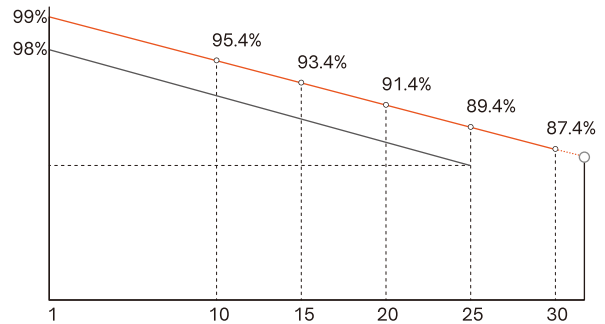


DHN-54R20/FS 450~470W

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 | 19.6kg |
| Cells Type | N-type 182×95.8mm |
| Dimension (L×W×T) | 1762×1134×32mm |
| Packing | 34pcs/Pallet, 884pcs/40HQ |

| | |
|--------------|---|
| Cable | 4.0mm ² , 300/200mm in length, (Including connector) length can be customized |
| Glass | 3.2mm High Transmission, Antireflection Coating |
| Junction Box | IP68, 3 Bypass Diodes |
| Connector | MC4 Compatible |

STC-Electrical Characteristics

| Module Type | DHN-54R20/FS | | | | |
|--|--------------|-------|-------|-------|-------|
| | | 450 | 455 | 460 | 465 |
| Maximum Power (P _{max} /W) | 450 | 455 | 460 | 465 | 470 |
| Open-circuit Voltage (V _{oc} /V) | 39.4 | 39.6 | 39.8 | 40.0 | 40.2 |
| Maximum Power Voltage (V _{mp} /V) | 33.5 | 33.7 | 33.9 | 34.1 | 34.3 |
| Short-circuit Current (I _{sc} /A) | 14.42 | 14.48 | 14.54 | 14.60 | 14.66 |
| Maximum Power Current (I _{mp} /A) | 13.43 | 13.50 | 13.57 | 13.64 | 13.70 |
| Module Efficiency (%) | 22.52 | 22.77 | 23.02 | 23.27 | 23.52 |

STC-Standard Test Environment: Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5

NOCT-Electrical Characteristics

| | | | | | |
|--|-------|-------|-------|-------|-------|
| Maximum Power (P _{max} /W) | 338 | 342 | 346 | 350 | 353 |
| Open-circuit Voltage (V _{oc} /V) | 37.4 | 37.6 | 37.8 | 38.0 | 38.2 |
| Maximum Power Voltage (V _{mp} /V) | 31.8 | 32.0 | 32.2 | 32.4 | 32.6 |
| Short-circuit Current (I _{sc} /A) | 11.64 | 11.69 | 11.74 | 11.79 | 11.84 |
| Maximum Power Current (I _{mp} /A) | 10.63 | 10.69 | 10.74 | 10.79 | 10.85 |

NOCT-Standard Test Environment: Irradiance 800W/m², Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s

Operating Parameters

| | |
|------------------------------------|-------------|
| Maximum System Voltage | 1500V DC |
| Operating Temperature | -40 ~ +85°C |
| Maximum Series Fuse Rating | 25A |
| Nominal Operating Cell Temperature | 45°C±2°C |
| Application Level | Class A |

Temperature Coefficient

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