

**DBB**

**DHN-54Z20/DG(BW)**  
**490~520W**

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

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

  
Bifacial Rate Up to 85% and More Back Power Generation by 5-25%

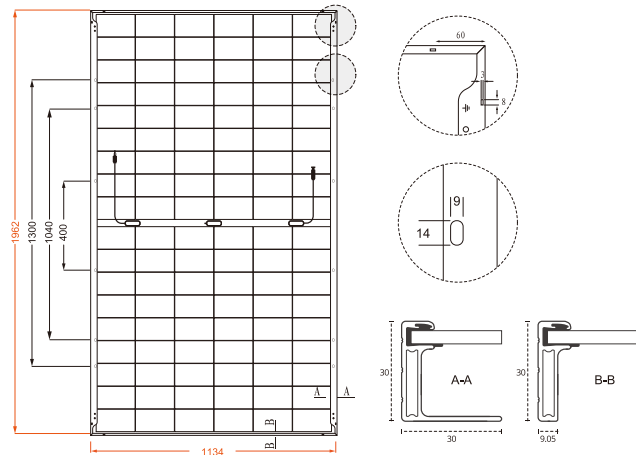
  
Double-glass Technology, higher encapsulation  
blocking and mechanical strength

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

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

# DHN-54Z20/DG(BW) 490~520W

## 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	26.6kg
Cells Type	N-type 182×105mm
Dimension (L×W×T)	1962×1134×30mm
Packing	36pcs/Pallet, 864pcs/40HQ

Cable(Including connector)	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	MC4 Compatible

## Electrical Characteristics

Module Type	DHN-54Z20/DG(BW)													
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	490	368	495	372	500	376	505	380	510	384	515	387	520	391
Open-circuit Voltage (Voc/V)	39.5	37.5	39.7	37.7	39.9	37.9	40.1	38.1	40.3	38.3	40.5	38.5	40.7	38.7
Maximum Power Voltage (Vmp/V)	33.5	31.8	33.7	32.0	33.9	32.2	34.1	32.4	34.3	32.6	34.5	32.8	34.7	33.0
Short-circuit Current (Isc/A)	15.58	12.58	15.64	12.63	15.70	12.68	15.76	12.72	15.82	12.77	15.88	12.82	15.94	12.87
Maximum Power Current (Imp/A)	14.63	11.58	14.69	11.63	14.75	11.68	14.81	11.72	14.87	11.77	14.93	11.82	14.99	11.86
Module Efficiency (STC)	22.02		22.25		22.47		22.70		22.92		23.15		23.37	
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)	515	520	525	530	536	541	546
	Module Efficiency (%)	23.1	23.4	23.6	23.8	24.1	24.3	24.5
15%	Maximum Power (Pmax)	563.5	569.3	575.0	580.8	586.5	592.3	598.0
	Module Efficiency (%)	25.3	25.6	25.8	26.1	26.4	26.6	26.9
25%	Maximum Power (Pmax)	612.5	618.8	625.0	631.3	637.5	643.8	650.0
	Module Efficiency (%)	27.5	27.8	28.1	28.4	28.7	28.9	29.2

## 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 Isc (ΔIsc)	0.046%/°C
Temperature Coefficient of Voc (βVoc)	-0.25%/°C
Temperature Coefficient of Pmax (γPmp)	-0.29%/°C
Snow load, frontside / Wind load, backside	5400Pa/2400Pa