DAH Solar
en.dahsolar.com

TOP PERFORMER 2025 kiwa PV MODULE RELIABILITY SCORECARD

TIER 1 BloombergNEF

DBB

DHN-48Z20/DG(BW)

465~485W

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

25 Material & technology warranty

30 Linear power output warranty

No-Busbar 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

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

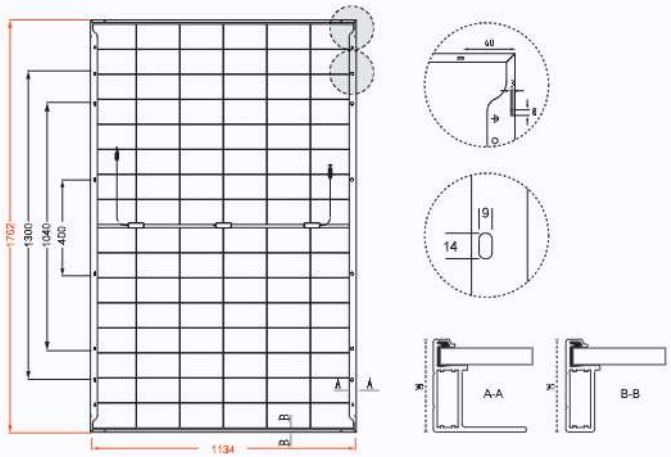
Butyl rubber has extremely low water vapor permeability and excellent water vapor barrier properties

Butyl rubber has better reliability, excellent high-temperature stability, and weather resistance

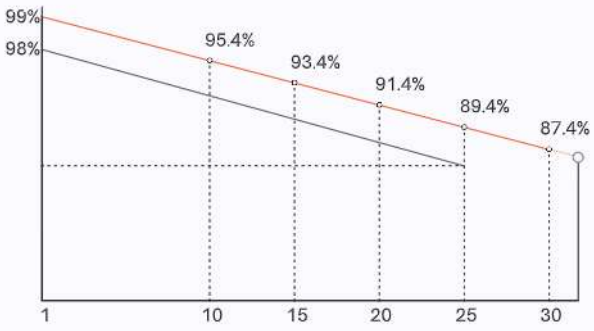
Butyl adhesive has good insulation and bonding properties

DHN-48Z20/DG(BW) 465~485W

Design



30-Year Linear Power Output Warranty



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

Mechanical Specification

No.of Cells	96 (6×16)
Weight	24.0kg
Cells Type	N-type 184×107mm
Dimension (L×W×T)	1762×1134×30mm
Packing	36pcs/Pallet, 936pcs/40HQ

Cable(Including connector)	4.0mm², 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-48Z20/DG(BW)									
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	465	350	470	353	475	357	480	361	485	365
Open-circuit Voltage (Voc/V)	36.6	34.8	36.8	35.0	37.0	35.2	37.2	35.3	37.4	35.5
Maximum Power Voltage (Vmp/V)	31.2	29.6	31.4	29.8	31.6	30.0	31.8	30.2	32.0	30.4
Short-circuit Current (Isc/A)	15.82	12.77	15.88	12.82	15.94	12.87	16.00	12.92	16.06	12.97
Maximum Power Current (Imp/A)	14.90	11.80	14.97	11.85	15.03	11.90	15.09	11.95	15.16	12.00
Module Efficiency (STC)	23.27		23.52		23.77		24.02		24.27	
Refer Bifacial Factor	80±5%									

STC-Standard Test Environment: Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5
NOCT-Standard Test Environment: Irradiance 800W/m², Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s

Double-Sided Power Generation Parameters (Rear gain)

5%	Maximum Power (Pmax)	488	494	499	504	509
	Module Efficiency (%)	24.4	24.7	25.0	25.2	25.5
15%	Maximum Power (Pmax)	534.8	540.5	546.3	552.0	557.8
	Module Efficiency (%)	26.8	27.1	27.3	27.6	27.9
25%	Maximum Power (Pmax)	581.3	587.5	593.8	600.0	606.3
	Module Efficiency (%)	29.1	29.4	29.7	30.0	30.3

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 (αIsc)	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

DAH Solar
en.dahsolar.com
Add: No.1 Yaoyuan Road, Luyang District, Hefei City, Anhui, China Facebook: www.facebook.com/DAHSolar · E-mail: sales@dahsolar.com