

**DBB**

**DHN-54R20/DG(CC/RR/MM/AA)**

**380~430W**

Colored 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

Multiple colors available,  
High tech coatings guarantee color stability for 30 years

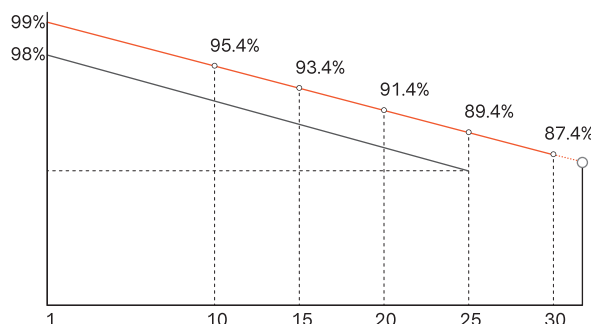
 Double-glass Technology, higher encapsulation blocking and mechanical strength

 No-Busbar(0BB) Technology, shorten 40% of the transmission distance. Reduces losses & improving conversion efficiency

 Fits various BIPV scenarios:  
roof, curtain wall, balcony, garden, corridor and other scenes

				
DHN-54R20/DG(CC) Claret violet RAL 4004	DHN-54R20/DG(RR) Ochre brown RAL 8007	DHN-54R20/DG(MM) Mint green RAL 6033	DHN-54R20/DG(AA) Anthracite grey RAL 7016	Color can be customized

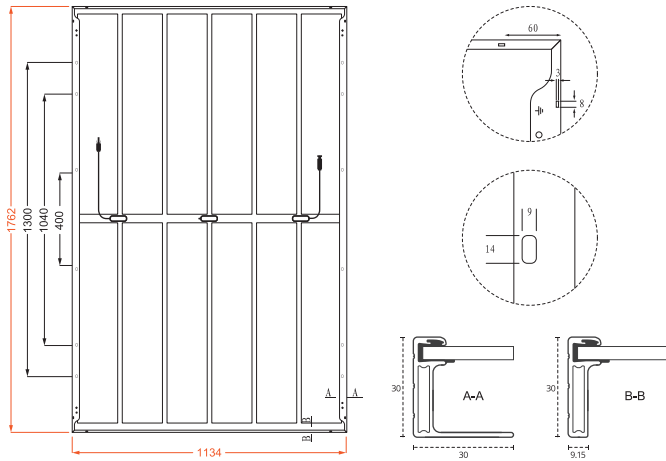
**30-Year Linear Power Output Warranty**



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

# DHN-54R20/DG(CC/RR/MM/AA) 380~430W

## Design



## Mechanical Specification

No. of Cells	108 (6×18)
Weight	23.9kg
Cells Type	N-type 182×95.8mm
Dimension (L×W×T)	1762×1134×30mm
Packing	36pcs/Pallet, 936pcs/40HQ
Cable	4.0mm <sup>2</sup> , 300/200mm in length, (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-54R20/DG(CC/RR/MM/AA)											
<b>STC-Electrical Characteristics</b>												
Maximum Power (Pmax/W)	380	385	390	395	400	405	410	415	420	425	430	
Open-circuit Voltage (Voc/V)	39.54	39.58	39.61	39.65	39.68	39.72	39.75	39.79	39.82	39.86	39.89	
Maximum Power Voltage (Vmp/V)	33.88	33.92	33.95	33.99	34.02	34.06	34.09	34.13	34.16	34.20	34.23	
Short-circuit Current (Isc/A)	11.58	11.75	11.92	12.09	12.26	12.43	12.60	12.77	12.94	13.11	13.28	
Maximum Power Current (Imp/A)	11.22	11.35	11.49	11.62	11.76	11.89	12.03	12.16	12.30	12.43	12.56	
<b>NOCT-Electrical Characteristics</b>												
Maximum Power (Pmax/W)	286	290	293	297	301	305	308	312	316	320	323	
Open-circuit Voltage (Voc/V)	37.56	37.60	37.63	37.66	37.70	37.73	37.76	37.80	37.83	37.86	37.90	
Maximum Power Voltage (Vmp/V)	32.19	32.22	32.25	32.29	32.32	32.35	32.39	32.42	32.45	32.49	32.52	
Short-circuit Current (Isc/A)	9.35	9.49	9.62	9.76	9.90	10.04	10.17	10.31	10.45	10.58	10.72	
Maximum Power Current (Imp/A)	8.88	8.99	9.09	9.20	9.31	9.41	9.52	9.63	9.73	9.84	9.94	
Module Efficiency (STC)	19.02%	19.27	19.52	19.77	20.02	20.27	20.52	20.77	21.02	21.27	21.52	
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)	399	404	410	415	420	425	431	436	441	446	452
	Module Efficiency (%)	19.97	20.23	20.49	20.76	21.02	21.28	21.55	21.81	22.07	22.33	22.60
15%	Maximum Power (Pmax)	437	443	449	454	460	466	472	477	483	489	495
	Module Efficiency (%)	21.87	22.16	22.45	22.73	23.02	23.31	23.60	23.89	24.17	24.46	24.75
25%	Maximum Power (Pmax)	475	481	488	494	500	506	513	519	525	531	538
	Module Efficiency (%)	23.77	24.09	24.40	24.71	25.02	25.34	25.65	25.96	26.27	26.59	26.90

## 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 (ΔVoc)	-0.25%/°C
Temperature Coefficient of Pmax (ΔPmp)	-0.29%/°C
Snow load, frontside / Wind load, backside	5400Pa/2400Pa