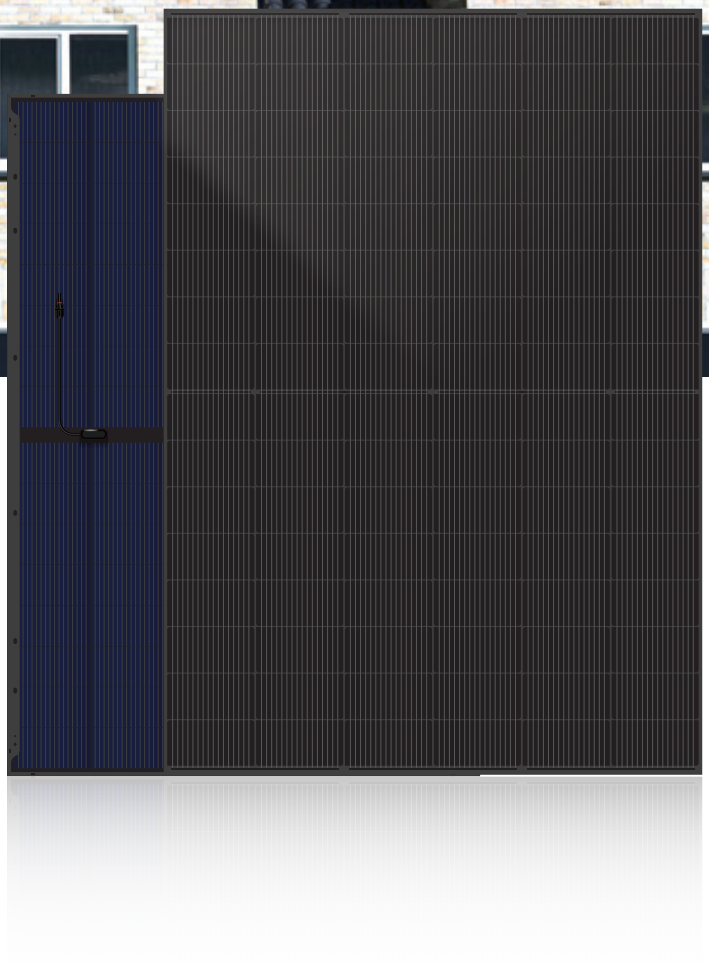
DAH Solar
en.dahsolar.com

TIER 1
BloombergNEF

DHN-48Z16/DG(BB)
425~455W
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

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 ligh performance

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

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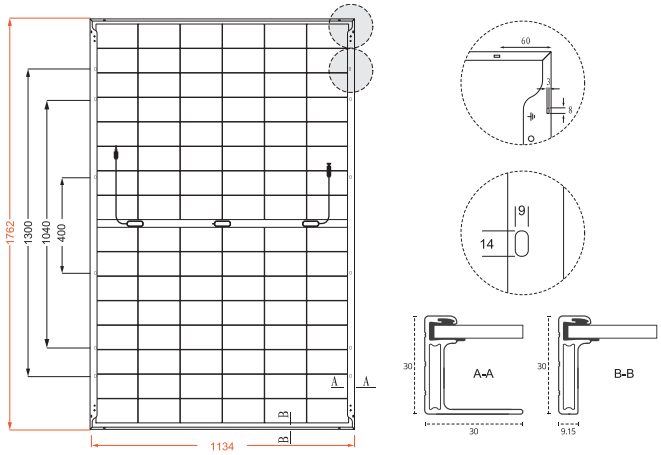
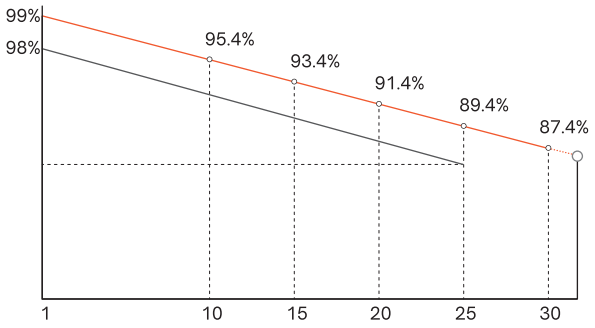
Design



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	23.9kg
Cells Type	N-type 182×105mm
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-48Z16/DG(BB)													
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	425	320	430	323	435	327	440	331	445	335	450	338	455	342
Open-circuit Voltage (Voc/V)	35.0	33.3	35.2	33.4	35.4	33.6	35.6	33.8	35.8	34.0	36.0	34.2	36.2	34.4
Maximum Power Voltage (Vmp/V)	29.6	28.1	29.8	28.3	30.0	28.5	30.2	28.7	30.4	28.9	30.6	29.1	30.8	29.3
Short-circuit Current (Isc/A)	15.34	12.38	15.40	12.43	15.46	12.48	15.52	12.53	15.58	12.58	15.64	12.63	15.70	12.68
Maximum Power Current (Imp/A)	14.36	11.37	14.43	11.42	14.50	11.48	14.57	11.53	14.64	11.59	14.71	11.64	14.77	11.69
Module Efficiency (STC)	21.27		21.52		21.77		22.02		22.27		22.52		22.77	
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)	446	452	457	462	467	473	478
	Module Efficiency (%)	22.3	22.6	22.9	23.1	23.4	23.6	23.9
15%	Maximum Power (Pmax)	488.8	494.5	500.3	506.0	511.8	517.5	523.3
	Module Efficiency (%)	24.5	24.7	25.0	25.3	25.6	25.9	26.2
25%	Maximum Power (Pmax)	531.3	537.5	543.8	550.0	556.3	562.5	568.8
	Module Efficiency (%)	26.6	26.9	27.2	27.5	27.8	28.2	28.5

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