

DHN-48Z16/DG/FS

450~460W

Full-Screen 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



Dispatched with Module



The side slotting is combined with an embedded pressure block, allowing for installation without the need for gaskets



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



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

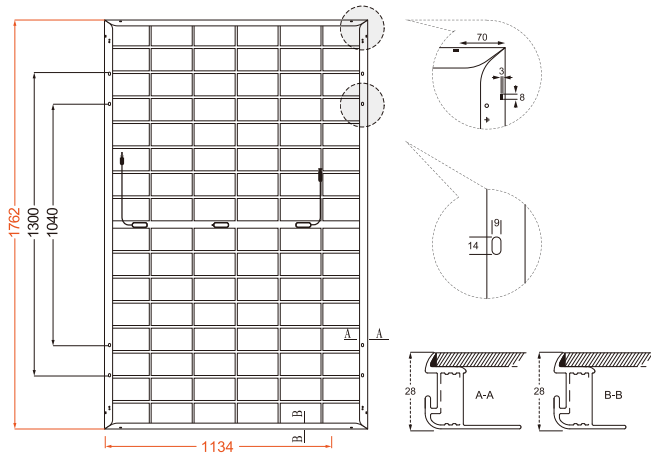


Double-glass Technology, higher encapsulation blocking and mechanical strength



DHN-48Z16/DG/FS 450~460W

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	24.3kg
Cells Type	N-type 182×105mm
Dimension (L×W×T)	1762×1134×28mm
Packing	37pcs/Pallet, 962pcs/40HQ

Cable (including connector)	4.0mm ² , 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/FS							
	STC		NOCT		STC		NOCT	
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (P _{max} /W)	450	338	455	342	460	346	460	346
Open-circuit Voltage (V _{oc} /V)	36.0	34.2	36.2	34.4	36.4	34.6	36.4	34.6
Maximum Power Voltage (V _{mp} /V)	30.6	29.1	30.8	29.3	31.0	29.5	31.0	29.5
Short-circuit Current (I _{sc} /A)	15.64	12.63	15.70	12.68	15.76	12.72	15.76	12.72
Maximum Power Current (I _{mp} /A)	14.71	11.64	14.77	11.69	14.84	11.75	14.84	11.75
Module Efficiency (STC)	22.52		22.77		23.02			
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 (P _{max})	473	478	483
	Module Efficiency (%)	23.6	23.9	24.2
15%	Maximum Power (P _{max})	517.5	523.3	529.0
	Module Efficiency (%)	25.9	26.2	26.5
25%	Maximum Power (P _{max})	562.5	568.8	575.0
	Module Efficiency (%)	28.2	28.5	28.8

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 I _{sc} (α _{Isc})	0.046%/°C
Temperature Coefficient of V _{oc} (β _{Voc})	-0.25%/°C
Temperature Coefficient of P _{max} (γ _{Pmp})	-0.29%/°C

Snow load, frontside / Wind load, backside	5400Pa/2400Pa
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