

DHN-54X16/DG(BW)

430~440W

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



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



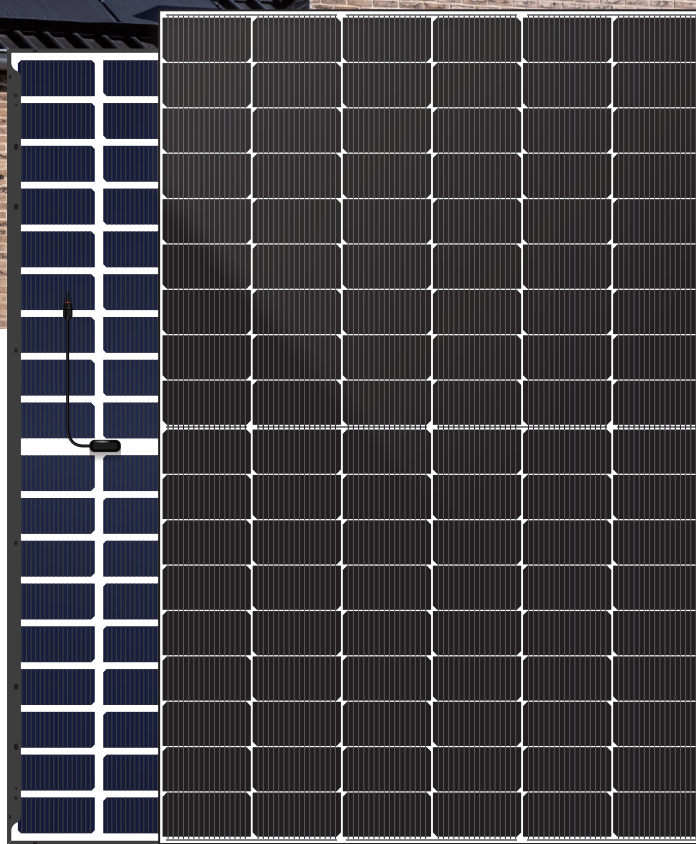
Higher performance in anti hidden cracking, acid
and alkali, salt spray, water vapor, UV, PID



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

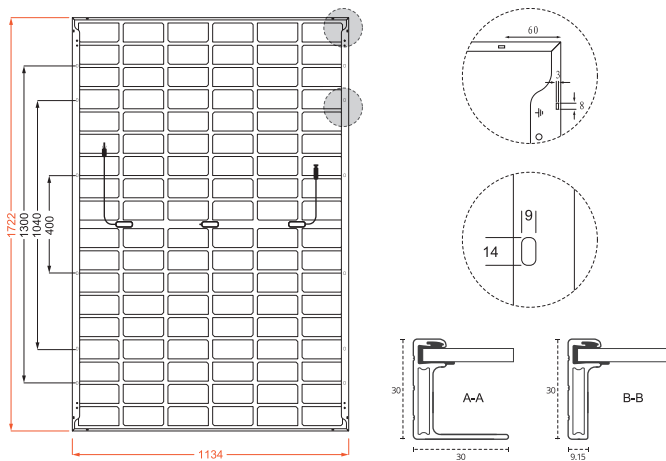


LECO laser assisted sintering technology,
reduces contact resistance and improves efficiency by 0.2% -0.5%

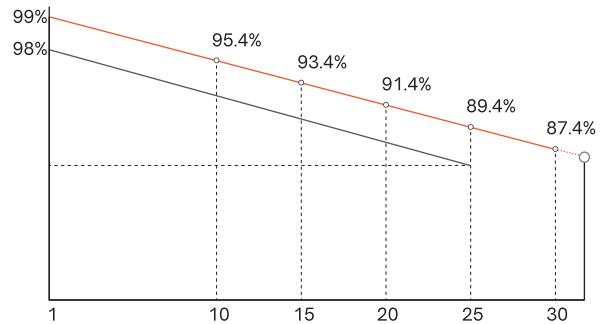


DHN-54X16/DG(BW) 430~440W

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	23.5kg
Cells Type	N-type 182×91mm
Dimension (L×W×T)	1722×1134×30mm
Packing	36pcs/Pallet, 936pcs/40HQ

Cable	4.0mm ² , 300/200mm in length, length can be customized
(Including connector)	
Glass	2.0mm High Transmission, Antireflection Coating
Junction Box	IP68, 3 Bypass Diodes
Connector	MC4 Compatible

Electrical Characteristics

Module Type			DHN-54X16/DG(BW)			
Test conditions	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	430	323	435	327	440	331
Open-circuit Voltage (Voc/V)	38.0	36.10	38.2	36.29	38.4	36.48
Maximum Power Voltage (Vmp/V)	32.5	30.88	32.7	31.07	32.9	31.26
Short-circuit Current (Isc/A)	13.84	11.17	13.90	11.22	13.96	11.27
Maximum Power Current (Imp/A)	13.23	10.47	13.30	10.53	13.37	10.59
Module Efficiency (STC)	22.02%		22.28%		22.53%	
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})	452	457	462
	Module Efficiency (%)	23.12	23.39	23.66
15%	Maximum Power (P _{max})	495	500	506
	Module Efficiency (%)	25.32	25.62	25.91
25%	Maximum Power (P _{max})	538	544	550
	Module Efficiency (%)	27.53	27.85	28.17

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} (ΔI _{sc})	0.046%/°C
Temperature Coefficient of V _{oc} (βV _{oc})	-0.25%/°C
Temperature Coefficient of P _{max} (γP _{mp})	-0.29%/°C
Snow load, frontside / Wind load, backside	5400Pa/2400Pa