






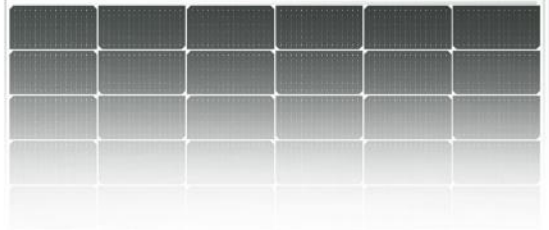
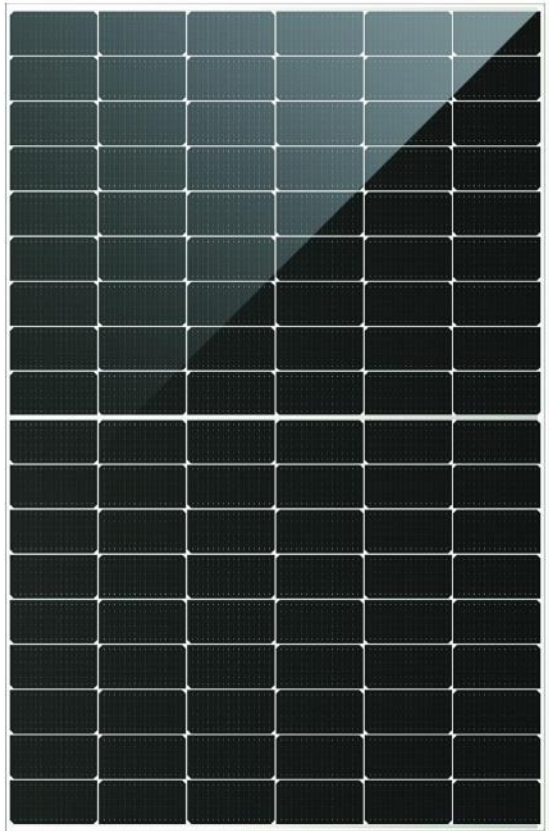
DHM54D30-TP

415-440W

High performance TOPCon
double glass bifacial solar module

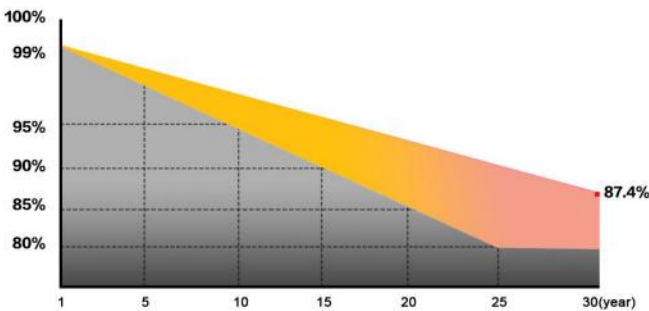
-  High performance N-Type TOPCon 16BB silicon cells, with a conversion efficiency upto 22.53%.
-  Up to 30 % more power output by Bifacial-Technology
-  Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2-30 years linear attenuation $\leq 0.4\%$
-  Fully automatic production line with full quality inspection to ensure product assurance
-  Components are resisting wind loads of 2400pa and snow loads of 5400pa

DAHAI SOLAR is a renewable energy enterprise founded in 2011 , with 5GW high efficiency solar module production and 10GW silicon production capacity. Adhering to the brand concept of "new energy for a new world", Dahai solar has always been committed to doing a stand out in the photovoltaic industry, transforming light with ingenuity and provide green energy to everybody.



30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY



The power attenuation shall not exceed 1% in the first year and 0.4% in the following years.



CQC TÜV CE
IEC 61215, IEC 61730
ISO 9001:Quality Management System
ISO 14001:Environmental Management System
ISO 45001:Occupational Health And Safety Management System

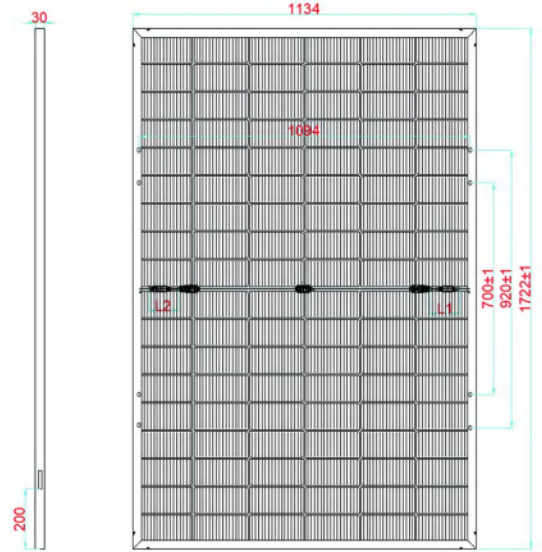
Nominal output	Power tolerance	Maximum efficiency	First year attenuation	Decay over the years
440W	0~+5W	22.53%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Weight	22kg
Dimension	1722×1134×30mm
No. of Cells	108(6x18)
Output Cable	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging information	36 pcs/pallet/216Pcs per20'GP 936 pcs per 40'HC

WORKING PARAMETERS

Maximum system voltage	1500V (TUV)
Operating temperature	-40°C ~ +85°C
Maximum series fuse rating	25A
Front side maximum static loading	5400pa
Back side maximum static loading	2400pa
Nominal operating cell temperature	45±2°C
Application Level	classA


TEMPERATURE CHARACTERISTICS

Temperature Coefficient of Pmax	-0.350%/°C
Temperature Coefficient of Voc	-0.274%/°C
Temperature Coefficient of Isc	0.044%/°C

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Modle	DHM54D30 -415/TP	DHM54D30 -420/TP	DHM54D30 -425/TP	DHM54D30 -430/TP	DHM54D30 -435/TP	DHM54D30 -440/TP
Maximum power (Pmax/W)	415	420	425	430	435	440
Voltage at maximum power point (Vmp/V)	31.75	31.95	32.15	32.35	32.55	32.75
Current at maximum power point (Imp/A)	13.07	13.15	13.22	13.29	13.36	13.44
Open circuit voltage (Voc/V)	36.95	37.15	37.35	37.55	37.75	37.95
Short circuit current (Isc/A)	13.81	13.88	13.94	14.01	14.08	14.15
Component efficiency [%]	21.25%	21.51%	21.76%	22.02%	22.28%	22.53%
Power tolerance (W)	0~+5					
Standard test environment	Irradiance 1000W/m ² , cell temperature 25°C, spectrum AM1.5					

Note: Due to continuous innovation, research and product upgrading, the parameters in this specification are not just a component, but can only be used for comparison between different types.

BIFACIAL OUTPUT - BACKSIDE POWER GAIN

Modle	DHM54D30 -415/TP	DHM54D30 -420/TP	DHM54D30 -425/TP	DHM54D30 -430/TP	DHM54D30 -435/TP	DHM54D30 -440/TP
5% Power output	436	441	446	452	457	462
Module Efficiency	22.31%	22.58%	22.85%	23.12%	23.39%	23.66%
10% Power output	457	462	468	473	479	484
Module Efficiency	23.38%	23.66%	23.94%	24.22%	24.50%	24.79%
20% Power output	498	504	510	516	522	528
Module Efficiency	25.50%	25.81%	26.12%	26.42%	26.73%	27.04%