

DHM54T35-TP

405-430W

Full-black Aesthetic

High performance N-Type TOPCon solar module

- Ⓐ High performance N-Type TOPCon 108 halfcell with a conversion efficiency upto 22.02%.
- Ⓓ Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- Ⓔ Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2 to 30 years linear attenuation $\leq 0.4\%$
- Ⓖ Advanced automatic production line with full quality inspection to ensure product assurance
- Ⓔ Excellent energy yield - in low-light conditions.

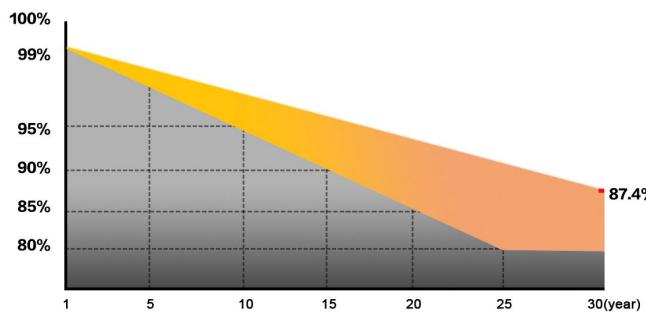
DAHAI SOLAR is a renewable energy enterprise founded in 2011 , with 5GW high efficiency solar module production and 10GW silicon production capacity. Adhering to the brand concept of "new energy for a new world", Dahai solar has always been committed to doing a stand out in the photovoltaic industry,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

30
YEARS
30 YEAR LINEARITY
POWER
OUTPUT WARRANTY

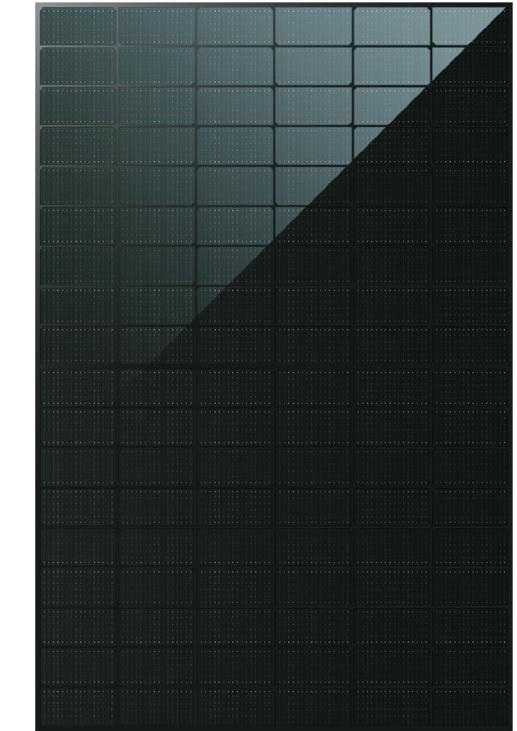
25
YEARS

15 YEARS OF EXCELLENT
PRODUCTS MATERIAL
AND PROCESS WARRANTY

EXCELLENT LINEAR PERFORMANCE GUARANTEE!



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



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



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website: www.dahaisolar.com

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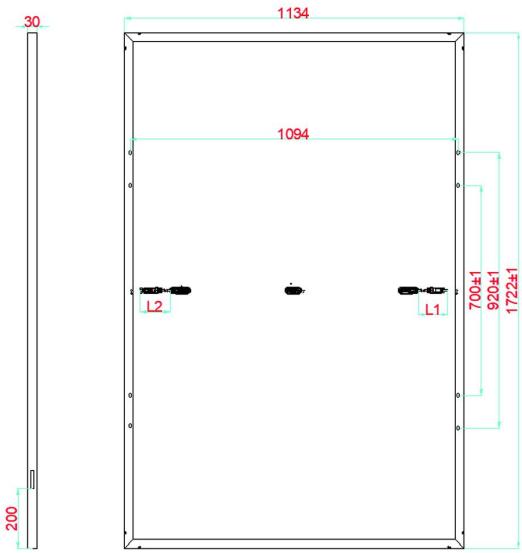
Nominal output	Power Tolerance	Maximum efficiency	First year power degradation	Year 2-30 power degradation
430W	0~+5W	22.02%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Weight	21.5kg
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 per 20"GP 936 pcs per 40"HC

WORKING PARAMETERS

Maximum system voltage	1500V DC
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 RATINGS(STC)

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

Module	DHM54T35 -405/TP	DHM54T35 -410/TP	DHM54T35 -415/TP	DHM54T35 -420/TP	DHM54T35 -425/TP	DHM54T35 -430/TP
Maximum power (Pmax/W)	405	410	415	420	425	430
Voltage at maximum power point (Vmpp/V)	31.35	31.65	31.85	32.05	32.25	32.45
Current at maximum power point (Impp/A)	12.92	12.95	13.03	13.10	13.18	13.25
Open circuit voltage (Voc/V)	37.13	37.53	37.78	38.03	38.28	38.53
Short circuit current (Isc/A)	13.83	13.90	13.94	13.99	14.04	14.09
Component efficiency [%]	20.74%	21.00%	21.25%	21.51%	21.76%	22.02%
Power tolerance (W)	0~+5					

Standard test environment Irradiance 1000W/m², 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.

ELECTRICAL PERFORMANCE PARAMETERS UNDER NOCT

Module	DHM54T35 -405/TP	DHM54T35 -410/TP	DHM54T35 -415/TP	DHM54T35 -420/TP	DHM54T35 -425/TP	DHM54T35 -430/TP
Maximum power (Pmax/W)	301	305	309	312	316	320
Voltage at maximum power point (Vmpp/V)	29.31	29.55	29.73	29.91	30.12	30.33
Current at maximum power point (Impp/A)	10.28	10.32	10.39	10.45	10.50	10.55
Open circuit voltage (Voc/V)	35.16	34.94	35.16	35.36	35.56	35.76
Short circuit current (Isc/A)	11.55	11.43	11.55	11.61	11.67	11.75
Nominal cell operating temperature(NOCT)	Irradiance 800W/m ² , ambient temperature 20°C, spectrum AM1.5G, wind speed 1m/s					

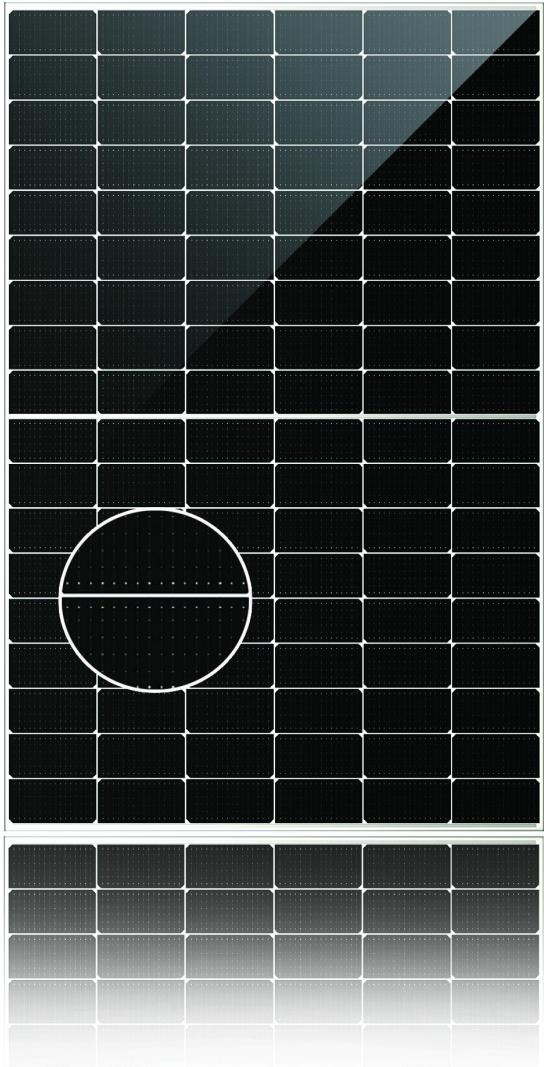
DHM54T31-TP

410-435W

High performance N-Type TOPCon solar module

- Ⓐ High performance N-Type TOPCon 108 halfcell with a conversion efficiency upto 22.28%.
- Ⓑ Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- Ⓒ Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2 to 30 years linear attenuation $\leq 0.4\%$
- Ⓓ Advanced automatic production line with full quality inspection to ensure product assurance
- Ⓔ Excellent energy yield through innovative TOP N-Type TOPCon Technology in low-light conditions.

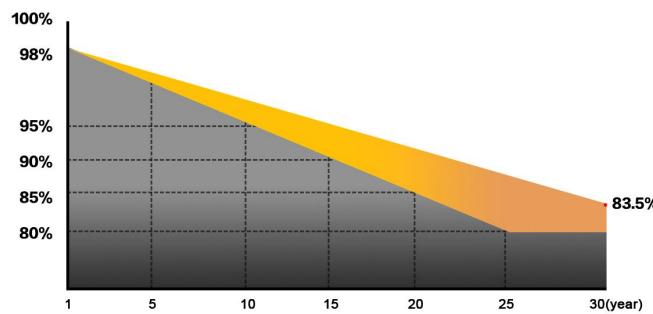
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**30 YEARS
PERFORMANCE
GUARANTEE**

**25 YEARS
MANUFACTURER'S
WARRANTY**

EXCELLENT LINEAR PERFORMANCE GUARANTEE!



The power attenuation less than exceed 1% in the first year and 0.4% in the following years.



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 IEC 61215, IEC 61730
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Nominal output	Power Tolerance	Maximum efficiency	First year power degradation	Year 2-30 power degradation
435W	0~+5W	22.28%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Weight	21.5kg
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 per 20"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

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Module	DHM54T31 -410/TP	DHM54T31 -415/TP	DHM54T31 -420/TP	DHM54T31 -425/TP	DHM54T31 -430/TP	DHM54T31 -435/TP
Maximum power (Pmax/W)	410	415	420	425	430	435
Voltage at maximum power point (Vmpp/V)	31.65	31.85	32.05	32.25	32.45	32.65
Current at maximum power point (Impp/A)	12.95	13.03	13.10	13.18	13.25	13.32
Open circuit voltage (Voc/V)	37.53	37.78	38.03	38.28	38.53	38.78
Short circuit current (Isc/A)	13.90	13.94	13.99	14.04	14.09	14.13
Component efficiency [%]	21.00%	21.25%	21.51%	21.76%	22.02%	22.28%
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.

ELECTRICAL PERFORMANCE PARAMETERS UNDER NOCT

Module	DHM54T31 -410/TP	DHM54T31 -415/TP	DHM54T31 -420/TP	DHM54T31 -425/TP	DHM54T31 -430/TP	DHM54T31 -435/TP
Maximum power (Pmax/W)	305	309	312	316	320	324
Voltage at maximum power point (Vmpp/V)	29.55	29.73	29.91	30.12	30.33	30.56
Current at maximum power point (Impp/A)	10.32	10.39	10.45	10.50	10.55	10.59
Open circuit voltage (Voc/V)	34.94	35.16	35.36	35.56	35.76	35.96
Short circuit current (Isc/A)	11.43	11.55	11.61	11.67	11.75	11.83
Nominal cell operating temperature(NOCT)	Irradiance 800W/m ² , ambient temperature 20°C, spectrum AM1.5G, wind speed 1m/s					

DHM72T31-TP

555-585W

High performance N-Type TOPCon solar module

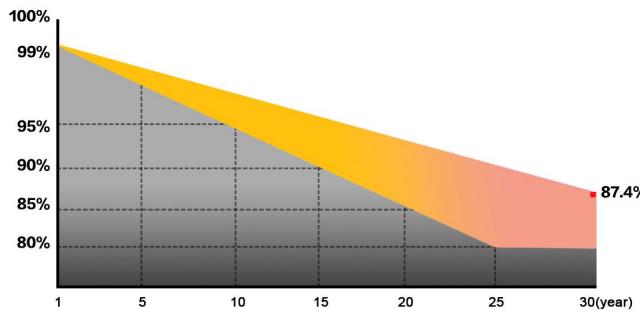
-  High performance N-Type TOPCon 108 halfcell with a conversion efficiency upto 22.64%..
-  Guaranteed positive power tolerance from 0-5 Wp by individual measurement
-  Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2 to 30 years linear attenuation $\leq 0.4\%$
-  Advanced automatic production line with full quality inspection to ensure product assurance
-  Excellent energy yield through innovative TOP N-Type TOPCon Technology in low-light conditions.

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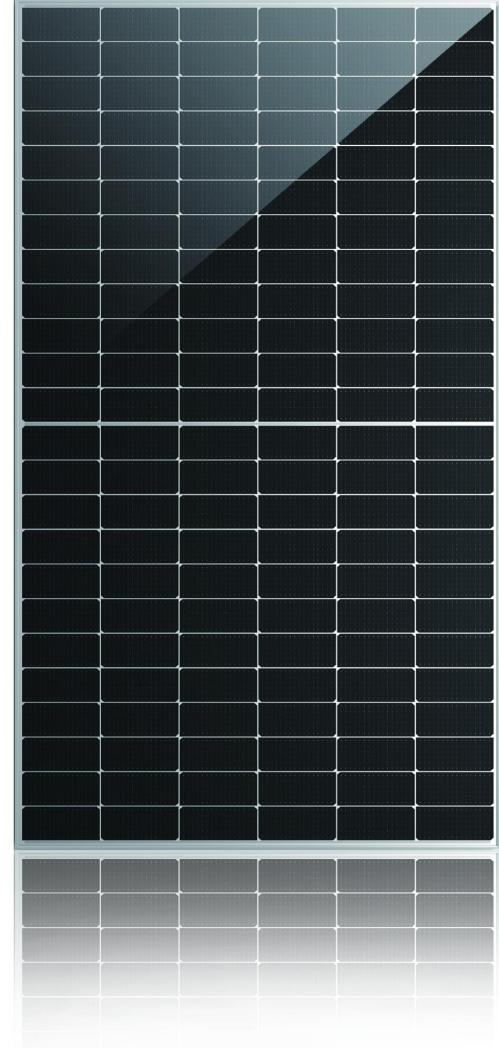
 **30 YEAR LINEARITY POWER OUTPUT WARRANTY**

 **25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY**

EXCELLENT LINEAR PERFORMANCE GUARANTEE!



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



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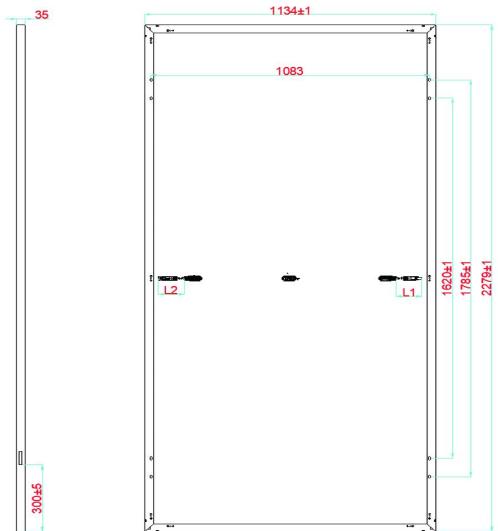
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Nominal output	Power tolerance	Maximum efficiency	First year power degradation	Year 2-30 power degradation
585W	0~+5W	22.64%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Weight	28kg
Dimension	2279×1134×35mm
No.of Cells	144(6x24)
Output Cable	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging information	31 pcs/pallet/155Pcs per 20"GP 620 pcs per 40"HC



WORKING PARAMETERS

Maximum system voltage	1500V DC
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	class A

TEMPERATURE RATINGS(STC)

Temperature Coefficient of Pmax	-0.350%/ $^{\circ}$ C
Temperature Coefficient of Voc	-0.274%/ $^{\circ}$ C
Temperature Coefficient of Isc	0.044%/ $^{\circ}$ C

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Irradiance 1000W/m², 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.

ELECTRICAL PERFORMANCE PARAMETERS UNDER NOCT

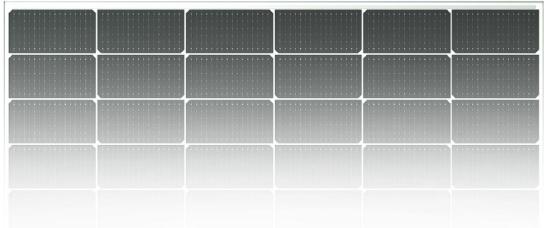
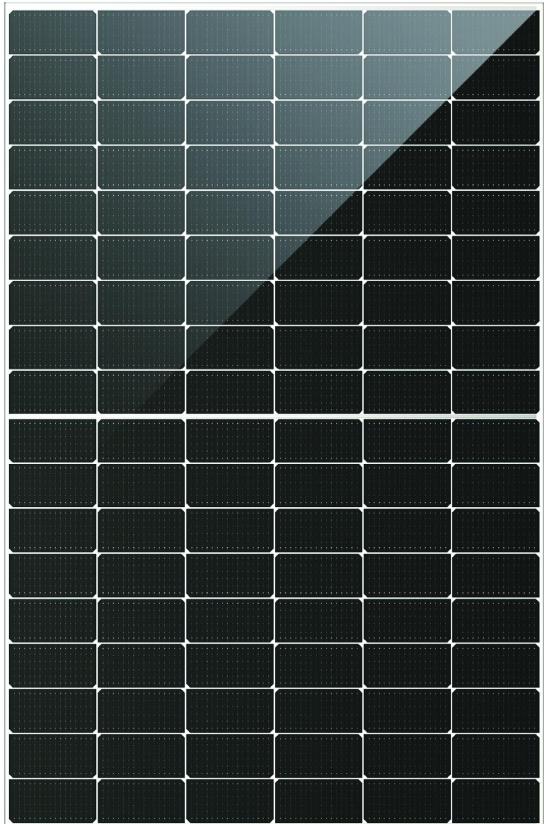
DHM54D30-TP

415-440W

High performance TOPCon
double glass bifacial solar module

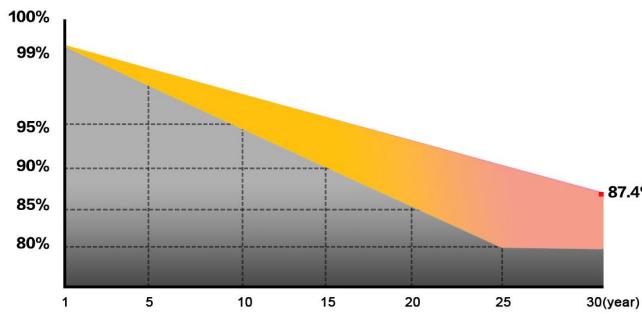
- High performance N-Type TOPCon 16BB silicon cells, with a conversion efficiency upto 22.53%.
- Up to 30 % more power output by Bifacial-Technology
- Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2-30 years linear attenuation $\leq 0.4\%$
- Fully automatic production line with full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

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30 YEAR LINEARITY
POWER
OUTPUT WARRANTY

15 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.



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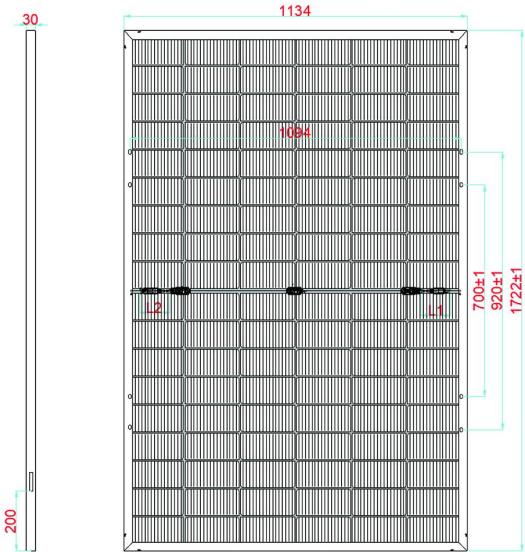
Nominal output	Power tolerance	Maximum efficiency	First year attenuation	Decay over the years
440W	0~+5W	22.53%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Weight	24.5kg
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 per 20"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

Module	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 (Vmpp/V)	31.75	31.95	32.15	32.35	32.55	32.75
Current at maximum power point (Impp/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

Module	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%

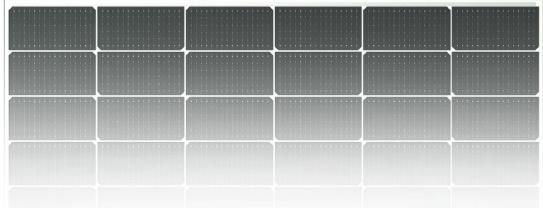
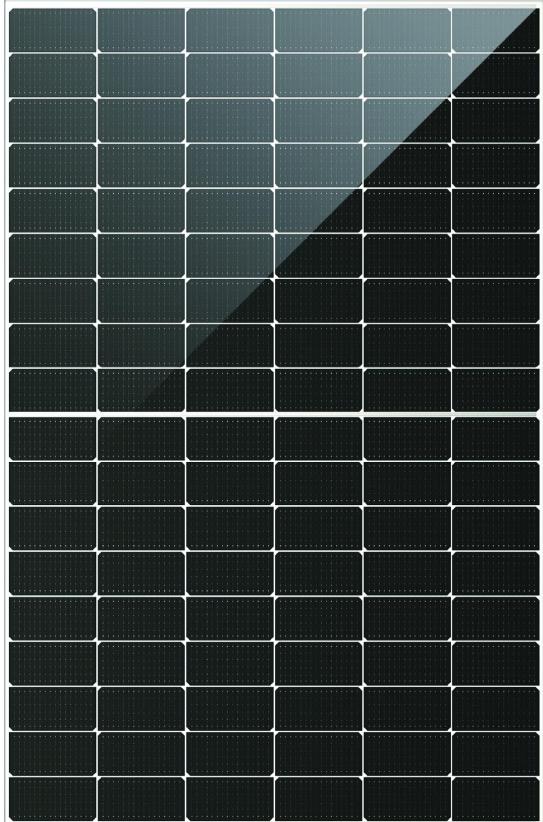
DHM54D30-TP

405-430W

High performance transparent TOPCon
double glass bifacial solar module

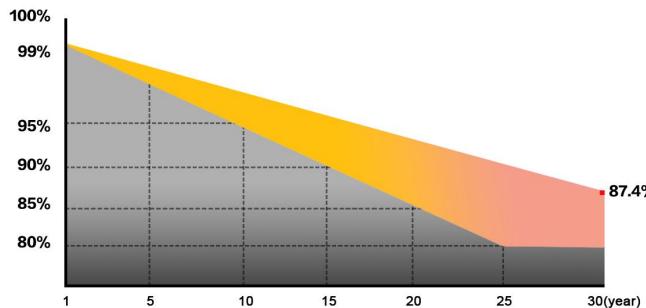
- High performance N-Type TOPCon 16BB silicon cells, with a conversion efficiency upto 22.02%.
- Up to 20 % more power output by Bifacial-Technology
- Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2-30 years linear attenuation $\leq 0.4\%$
- Fully automatic production line with full quality inspection to ensure product assurance
- Components are resisting wind loads of 2400pa and snow loads of 5400pa

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



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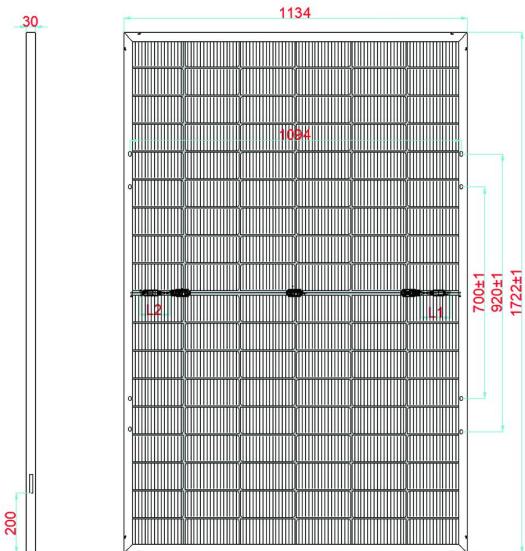
Nominal output	Power tolerance	Maximum efficiency	First year attenuation	Decay over the years
430W	0~+5W	22.02%	≤1.0%	≤0.4%

MECHANICAL PROPERTIES

Cell type	Monocrystalline-TOPCon
Weight	24.5kg
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 per 20"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

Module	DHM54D30 -405/TP	DHM54D30 -410/TP	DHM54D30 -415/TP	DHM54D30 -420/TP	DHM54D30 -425/TP	DHM54D30 -430/TP
Maximum power (Pmax/W)	405	410	415	420	425	430
Voltage at maximum power point (Vmpp/V)	31.35	31.55	31.75	31.95	32.15	32.35
Current at maximum power point (Impp/A)	12.92	13.00	13.07	13.15	13.22	13.29
Open circuit voltage (Voc/V)	36.55	36.75	36.95	37.15	37.35	37.55
Short circuit current (Isc/A)	13.68	13.75	13.81	13.88	13.94	14.01
Component efficiency [%]	20.74%	21.00%	21.25%	21.51%	21.76%	22.02%
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

Module	DHM54D30 -405/TP	DHM54D30 -410/TP	DHM54D30 -415/TP	DHM54D30 -420/TP	DHM54D30 -425/TP	DHM54D30 -430/TP
5% Power output	425	431	436	441	446	452
Module Efficiency	21.78%	22.05%	22.31%	22.58%	22.85%	23.12%
10% Power output	446	451	457	462	468	473
Module Efficiency	22.81%	23.10%	23.38%	23.66%	23.94%	24.22%
20% Power output	486	492	498	504	510	516
Module Efficiency	24.89%	25.20%	25.50%	25.81%	26.12%	26.42%