

### Monocrystalline module

# DHM54T31-MR 395-420W

High efficiency monocrystalline module

- Using 182 multi bus bar efficient monocrystalline silicon cells, the output power reaches 420W with a conversion efficiency reaching 21.51%
- Compact dimensions with less than 2 square meters for easy installation.
- Weighing 21.5 kg it can be easily carried by one person
- Fully automatic production line with full quality inspection to ensure product assurance.
- The Components are resisting wind loads of 2400pa and snow loads of 5400paa

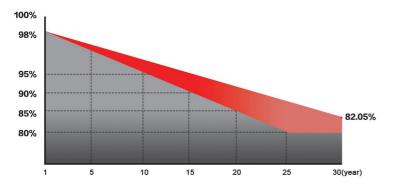
DAHAI SOLAR is a renewable energy enterprise founded in 2011, with 5GW high efficiency solar module production capacity, 10GW silicon production capacity. Adhering to the brand concept of "new energy, new world", Dahai solar has always been committed to doing a stand out in the photovoltaic industry,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





25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

## 30 YEAR EXCESS LINEAR POWER OUTPUT WARRANTY



The power attenuation shall not exceed 2% in the first year and 0.55% in the following years.

# COMPLETE QUALITY MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION







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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Maximum efficiency
Power tolerance
Highest component conversion
efficiency
First year attenuation
Decay over the
years

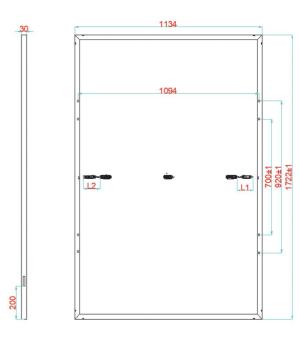
420W
0∼+5W
21.51%
≤2.0%
≤0.55%

#### **MECHANICAL PROPERTIES**

Battery type	Monocrystalline			
Component weight	21.5kg			
Component Size	1722×1134×30mm			
Number of Cells	108(6x18)			
Cable cross-sectional area	4mm²			
Junction Box	IP68, 3 diodes			
Connector	MC4-EVO2			
Packaging information	36 pieces/pallet 936 pieces /40 'container			

#### **WORKING PARAMETERS**

Maximum system voltage	1500V DC	
Operating temperature	-40°C~ + 85°C	
Maximum fuse current rating	25A	
Maximum static load, front	5400pa	
Maximum static load,back side	2400pa	
nominal battery operating temperature	45±2℃	
Application Level	classA	



#### **TEMPERATURE CHARACTERISTICS**

Power	-0.350%/℃
Open circuit voltage	-0.274%/℃
Short-circuit current	0.044%/℃

#### **ELECTRICAL PERFORMANCE PARAMETERS UNDER STC**

Modle	DHM54T31 -395/MR	DHM54T31 -400/MR	DHM54T31 -405/MR	DHM54T31 -410/MR	DHM54T31 -415/MR	DHM54T31 -420/MR
Maximum power (W)	395	400	405	410	415	420
Voltage at maximum power point (VMP/V)	30.71	31.01	31.31	31.60	31.89	32.15
Current at maximum power point (IMP/A)	12.86	12.90	12.94	12.97	13.01	13.06
Open circuit voltage (VOC/V)	36.72	37.02	37.24	37.50	37.73	37.98
Short circuit current (ISC/A)	13.67	13.75	13.81	13.88	13.95	13.99
Component efficiency [%]	20.23%	20.48%	20.74%	21.00%	21.25%	21.51%
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**

DHM54T31 -395/MR	DHM54T31 -400/MR	DHM54T31 -405/MR	DHM54T31 -410/MR	DHM54T31 -415/MR	DHM54T31 -420/MR
294	298	301	305	309	312
28.99	29.29	29.60	29.88	30.15	30.43
10.14	10.16	10.18	10.21	10.24	10.27
34.94	35.14	35.35	35.55	35.85	36.15
11.43	11.50	11.58	11.65	11.71	11.77
	-395/MR 294 28.99 10.14 34.94	-395/MR -400/MR 294 298 28.99 29.29 10.14 10.16 34.94 35.14	-395/MR         -400/MR         -405/MR           294         298         301           28.99         29.29         29.60           10.14         10.16         10.18           34.94         35.14         35.35	-395/MR         -400/MR         -405/MR         -410/MR           294         298         301         305           28.99         29.29         29.60         29.88           10.14         10.16         10.18         10.21           34.94         35.14         35.35         35.55	-395/MR         -400/MR         -405/MR         -410/MR         -415/MR           294         298         301         305         309           28.99         29.29         29.60         29.88         30.15           10.14         10.16         10.18         10.21         10.24           34.94         35.14         35.35         35.55         35.85

Nominal cell operating temperature(NOCT) Irradiance800W/m³, ambient temperature20°C, spectrum AM1.5G, wind speed 1m/s