

DHM54T31-MR

395-420W

High performance solar module 108 halfcell, monocrystalline

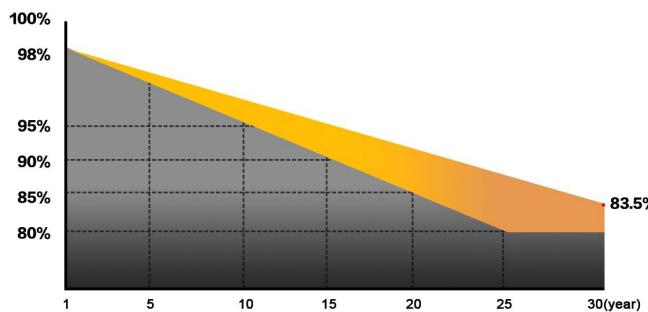
- High performance through Half-Cut-technology and selected 182 multi bus bar efficient monocrystalline cells, with a conversion efficiency up to 21.51%
- Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- Ultra-low attenuation rate, first year attenuation $\leq 1\%$, 2 to 30 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.



15 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.



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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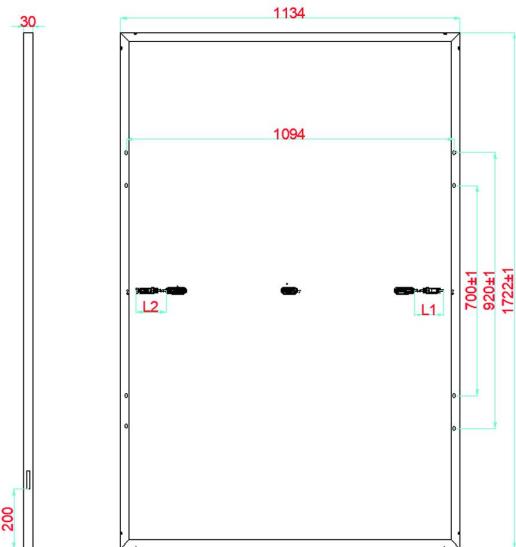
| Nominal output | Power tolerance | Maximum efficiency | First year power degradation | Year 2 - 30 power degradation |
|----------------|-----------------|--------------------|------------------------------|-------------------------------|
| 420W | 0~+5W | 21.51% | ≤2.0% | ≤0.55% |

MECHANICAL PROPERTIES

| | |
|-----------------------|---|
| Cell type | Monocrystalline |
| 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 pieces/pallet 936 pieces /40 'HC.216pieses/2040 'GP |

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 | DHM54T31 -395/MR | DHM54T31 -400/MR | DHM54T31 -405/MR | DHM54T31 -410/MR | DHM54T31 -415/MR | DHM54T31 -420/MR |
|---|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum power (Pmax/W) | 395 | 400 | 405 | 410 | 415 | 420 |
| Voltage at maximum power point (Vmpp/V) | 30.71 | 31.01 | 31.31 | 31.60 | 31.89 | 32.15 |
| Current at maximum power point (Impp/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/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 -395/MR | DHM54T31 -400/MR | DHM54T31 -405/MR | DHM54T31 -410/MR | DHM54T31 -415/MR | DHM54T31 -420/MR |
|--|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum power (W) | 294 | 298 | 301 | 305 | 309 | 312 |
| Voltage at maximum power point (Vmpp/V) | 28.99 | 29.29 | 29.60 | 29.88 | 30.15 | 30.43 |
| Current at maximum power point (Impp/A) | 10.14 | 10.16 | 10.18 | 10.21 | 10.24 | 10.27 |
| Open circuit voltage (Voc/V) | 34.94 | 35.14 | 35.35 | 35.55 | 35.85 | 36.15 |
| Short circuit current (Isc/A) | 11.43 | 11.50 | 11.58 | 11.65 | 11.71 | 11.77 |
| Nominal cell operating temperature(NOCT) | Irradiance 800W/m ² , ambient temperature 20°C, spectrum AM1.5G, wind speed 1m/s | | | | | |



Monocrystalline module

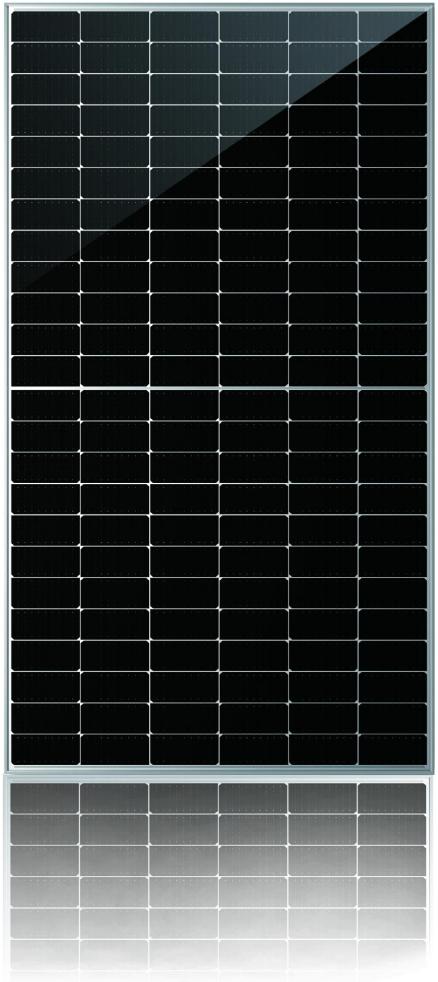
DHM72T20-MR

440-465W

High performance monocrystalline solar module

- (A) High performance through Half-Cut-technology and selected 166 multi bus bar efficient monocrystalline cells,with a conversion efficiency up to 21.36%!
- With wide range in sizes and power generation efficiency,easy to install
- Advanced automatic production line with full quality inspection to ensure product assurance
- Excellent energy yield and in low-light conditions.

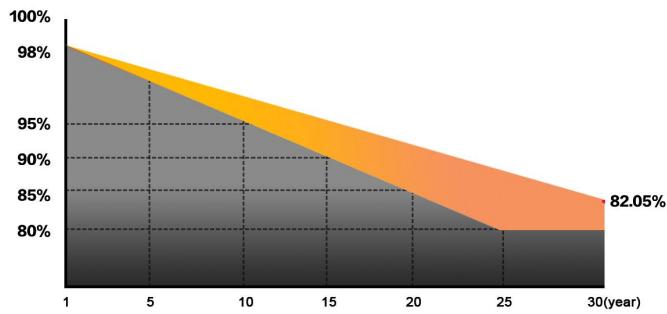
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30 YEARS 30 YEAR LINEARITY
POWER
OUTPUT WARRANTY

25 YEARS 15 YEARS OF EXCELLENT
PRODUCTS MATERIAL
AND PROCESS WARRANTY

EXCELLENT LINEAR PERFORMANCE GUARANTEE!



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



CQC TUV CE
IEC 61215, IEC 61730
ISO 9001:Quality Management System
ISO 14001:Environmental Management System
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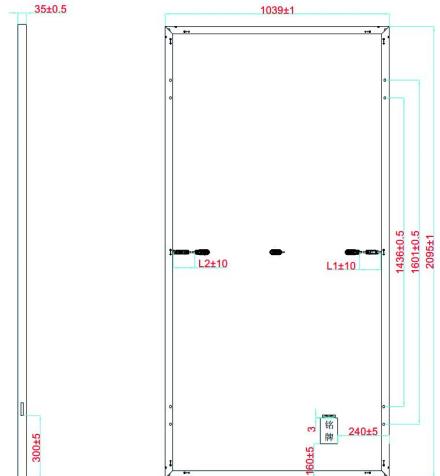
| Nominal output | Power tolerance | Maximum efficiency | First year power degradation | Year 2 - 30 power degradation |
|----------------|-----------------|--------------------|------------------------------|-------------------------------|
| 465W | 0~+5W | 21.36% | ≤2.0% | ≤0.55% |

MECHANICAL PROPERTIES

| | |
|-----------------------|---|
| Cell type | Monocrystalline |
| Weight | 24.5kg |
| Component Size | 2095x1039x35mm |
| No. of Cells | 144(6x24) |
| Output cable | 4mm ² |
| Junction Box | IP68, 3 diodes |
| Connector | MC4-EVO2 |
| Packaging information | 31 pieces/pallet 620 pieces /40' HC / 155 pcs per 20' GP |

WORKING PARAMETERS

| | |
|------------------------------------|---------------|
| Maximum system voltage | 1000V DC |
| Operating temperature | -40°C ~ +85°C |
| Maximum series fuse rating | 20A |
| 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 | DHM72T20 -440/MR | DHM72T20 -445/MR | DHM72T20 -450/MR | DHM72T20 -455/MR | DHM72T20 -460/MR | DHM72T20 -465/MR |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum power (Pmax/W) | 440 | 445 | 450 | 455 | 460 | 465 |
| Voltage at maximum power point (Vmpp/V) | 40.89 | 41.20 | 41.51 | 41.81 | 42.12 | 42.42 |
| Current at maximum power point (Impp/A) | 10.76 | 10.80 | 10.84 | 10.88 | 10.92 | 10.96 |
| Open circuit voltage (Voc/V) | 49.38 | 49.53 | 49.67 | 49.82 | 49.97 | 50.13 |
| Short circuit current (Isc/A) | 11.27 | 11.31 | 11.35 | 11.39 | 11.43 | 11.47 |
| Component efficiency [%] | 20.21% | 20.44% | 20.67% | 20.90% | 21.13% | 21.36% |
| 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 | DHM72T20 -440/MR | DHM72T20 -445/MR | DHM72T20 -450/MR | DHM72T20 -455/MR | DHM72T20 -460/MR | DHM72T20 -465/MR |
|--|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum power (Pmax/W) | 327 | 331 | 335 | 339 | 342 | 346 |
| Voltage at maximum power point (Vmpp)[V] | 37.21 | 37.49 | 37.77 | 38.05 | 38.33 | 38.60 |
| Current at maximum power point (Impp/A) | 8.80 | 8.83 | 8.86 | 8.90 | 8.93 | 8.96 |
| Open circuit voltage (Voc/V) | 41.97 | 42.10 | 42.22 | 42.35 | 42.47 | 42.61 |
| Short circuit current (Isc/A) | 9.58 | 9.61 | 9.65 | 9.68 | 9.72 | 9.75 |
| Nominal cell operating temperature(NOCT) | Irradiance 800W/m ² , ambient temperature 20°C, spectrum AM1.5G, wind speed 1m/s | | | | | |

DHM72T31-MR

530-555W

High efficiency monocrystalline module

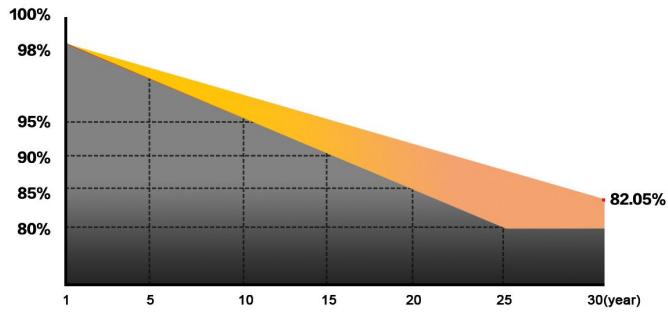
- High performance through Half-Cut-technology and selected 182 multi bus bar efficient monocrystalline cells, with a conversion efficiency up to 21.48%
- High module performance for commercial large-scale solar power project, and guaranteed positive power tolerance
- High stability and 100% visual electroluminescence inspection in production
- 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 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.

30 YEAR LINEARITY POWER OUTPUT WARRANTY

15 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

EXCELLENT LINEAR PERFORMANCE GUARANTEE!



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

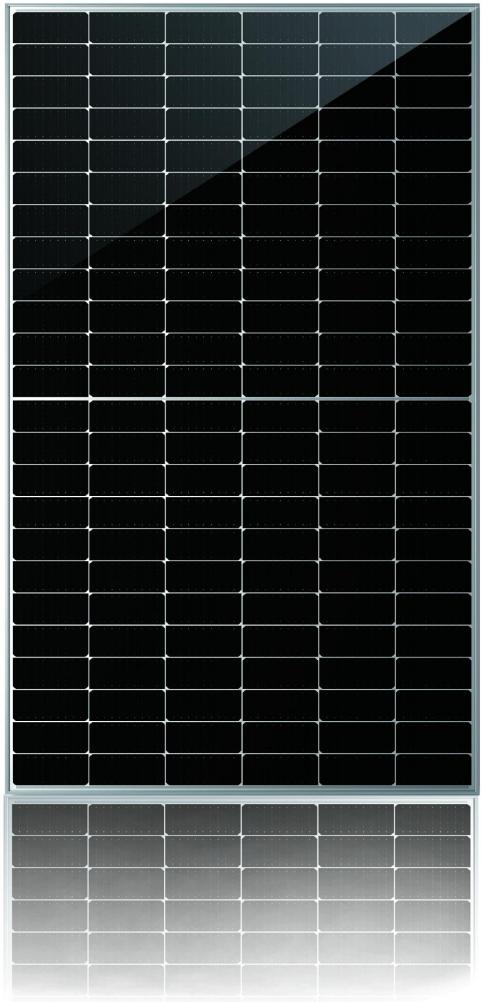


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ISO 9001:Quality Management System
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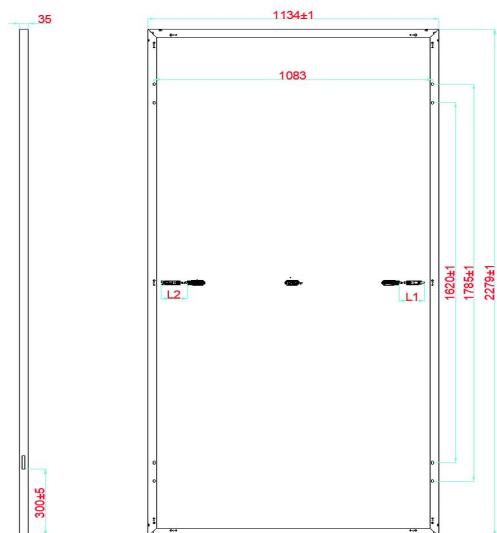
| Nominal output | Power tolerance | Maximum efficiency | First year power degradation | Year 2 - 30 power degradation |
|----------------|-----------------|--------------------|------------------------------|-------------------------------|
| 555W | 0~+5W | 21.48% | ≤2.0% | ≤0.55% |

MECHANICAL PROPERTIES

| | |
|-----------------------|--|
| Cell type | Monocrystalline |
| Weight | 28kg |
| Dimension | 2279x1134x35mm |
| No. of cells | 144(6x24) |
| Output cable | 4mm ² |
| Junction Box | IP68, 3 diodes |
| Connector | MC4-EVO2 |
| Packaging information | 31 pieces/pallet 620 pieces /40'HC / 155 pcs per 20' GP |

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 | DHM72T31-530/MR | DHM72T31-535/MR | DHM72T31-540/MR | DHM72T31-545/MR | DHM72T31-550/MR | DHM72T31-555/MR |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum power (W) | 530 | 535 | 540 | 545 | 550 | 555 |
| Voltage at maximum power point (Vmpp/V) | 41.53 | 41.82 | 42.12 | 42.41 | 42.71 | 42.91 |
| Current at maximum power point (Impp/A) | 12.76 | 12.79 | 12.82 | 12.85 | 12.88 | 12.93 |
| Open circuit voltage (Voc/V) | 49.20 | 49.35 | 49.51 | 49.69 | 49.88 | 50.08 |
| Short circuit current (Isc/A) | 13.68 | 13.75 | 13.82 | 13.89 | 13.97 | 14.04 |
| Component efficiency [%] | 20.51% | 20.70% | 20.89% | 21.09% | 21.28% | 21.48% |
| 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 | DHM72T31-530/MR | DHM72T31-535/MR | DHM72T31-540/MR | DHM72T31-545/MR | DHM72T31-550/MR | DHM72T31-555/MR |
|--|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum power (Pmax/W) | 394 | 398 | 402 | 405 | 409 | 413 |
| Voltage at maximum power point (Vmpp)[V] | 38.30 | 38.55 | 38.79 | 39.04 | 39.28 | 39.49 |
| Current at maximum power point (Impp)[A] | 10.30 | 10.33 | 10.36 | 10.39 | 10.42 | 10.46 |
| Open circuit voltage (Voc)[V] | 45.96 | 46.11 | 46.27 | 46.42 | 46.58 | 46.74 |
| Short circuit current (Isc)[A] | 11.01 | 11.08 | 11.14 | 11.20 | 11.27 | 11.34 |
| Nominal cell operating temperature(NOCT) | Irradiance 800W/m ² , ambient temperature 20°C, spectrum AM1.5G, wind speed 1m/s | | | | | |

DHM66T50-MR

645-670W

High efficiency monocrystalline module

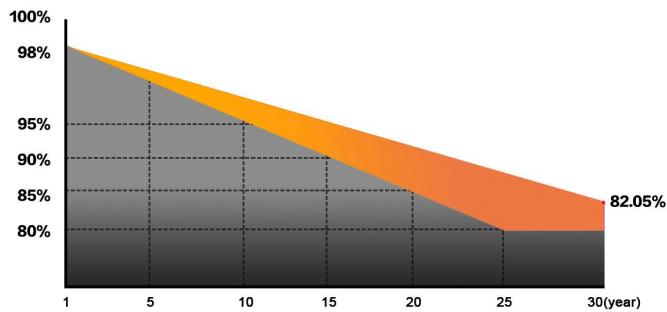
- Ⓐ High performance through Half-Cut-technology and selected 210,12BB efficient monocrystalline cells,with a conversion efficiency up to 21.57%
- Ⓑ Designed for large and medium scale solar power station project, striving for high efficiency
- Ⓒ Advanced automatic production line with full quality inspection to ensure product assurance
- Ⓓ Excellent energy yield and in low-light conditions.

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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 2% in the first year and 0.55% in the following years.

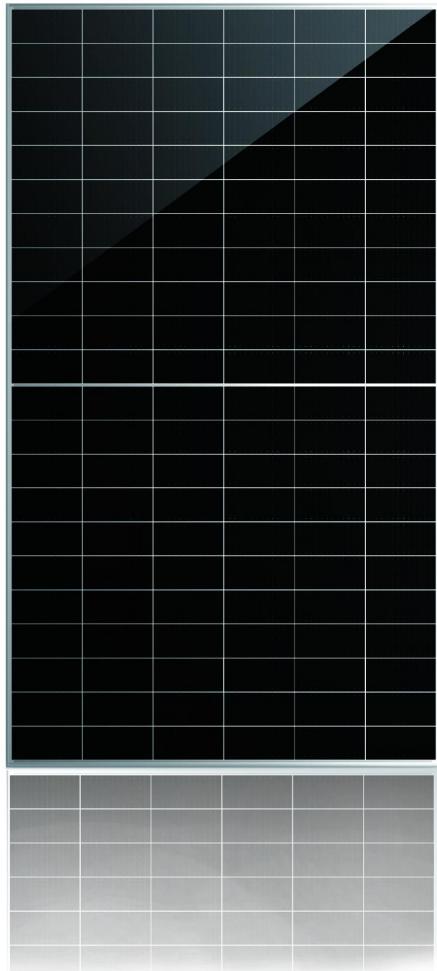


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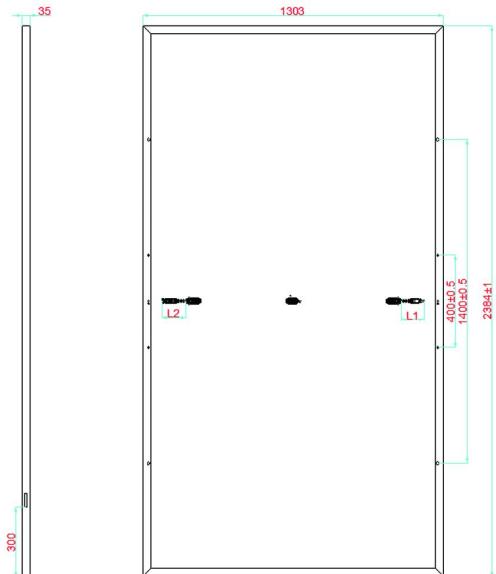
| Nominal output | Power tolerance | Maximum efficiency | First year power degradation | Year 2 - 30 power degradation |
|----------------|-----------------|--------------------|------------------------------|-------------------------------|
| 670W | 0~+5W | 21.57% | <2.0% | ≤0.55% |

MECHANICAL PROPERTIES

| | |
|-----------------------|---|
| Cell type | Monocrystalline |
| Weight | 33kg |
| Component Size | 2384×1303×35mm |
| No. of Cells | 132(6x22) |
| Output cable | 4mm ² |
| Junction Box | IP68, 3 diodes |
| Connector | MC4-EVO2 |
| Packaging information | 31 pieces/pallet 558 pieces /40 'container |

WORKING PARAMETERS

| | |
|------------------------------------|---------------|
| Maximum system voltage | 1500V DC |
| Operating temperature | -40°C~ + 85°C |
| Maximum series fuse rating | 30A |
| Front side maximum static loading | 5400pa |
| Back side maximum static loading | 2400pa |
| Nominal cell operating temperature | 45±2°C |
| Application Level | classA |



TEMPERATURE RATINGS (STC)

| | |
|---------------------------------|------------|
| Temperature Coefficient of Pmax | -0.340%/°C |
| Temperature Coefficient of Voc | -0.253%/°C |
| Temperature Coefficient of Isc | 0.040%/°C |

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

| Module | DHM66T50 -645/MR | DHM66T50 -650/MR | DHM66T50 -655/MR | DHM66T50 -660/MR | DHM66T50 -665/MR | DHM66T50 -670/MR |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum power (Pmax/W) | 645 | 650 | 655 | 660 | 665 | 670 |
| Voltage at maximum power point (Vmp/V) | 37.48 | 37.68 | 37.89 | 38.11 | 38.31 | 38.52 |
| Current at maximum power point (Imp/A) | 17.21 | 17.25 | 17.29 | 17.32 | 17.36 | 17.39 |
| Open circuit voltage (Voc/V) | 45.12 | 45.32 | 45.53 | 45.73 | 45.95 | 46.14 |
| Short circuit current (Isc/A) | 18.24 | 18.29 | 18.33 | 18.39 | 18.44 | 18.50 |
| Component efficiency [%] | 20.76% | 20.92% | 21.09% | 21.25% | 21.41% | 21.57% |
| 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 | DHM66T50 -645/MR | DHM66T50 -650/MR | DHM66T50 -655/MR | DHM66T50 -660/MR | DHM66T50 -665/MR | DHM66T50 -670/MR |
|--|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Maximum power (Pmax/W) | 481 | 485 | 488 | 492 | 496 | 500 |
| Voltage at maximum power point (Vmp/V) | 34.63 | 34.84 | 35.05 | 35.25 | 35.43 | 35.62 |
| Current at maximum power point (Imp/A) | 13.89 | 13.91 | 13.93 | 13.96 | 13.99 | 14.02 |
| Open circuit voltage (Voc/V) | 42.30 | 42.53 | 42.74 | 42.94 | 43.13 | 43.31 |
| Short circuit current (Isc/A) | 14.53 | 14.60 | 14.66 | 14.75 | 14.83 | 14.91 |
| Nominal cell operating temperature(NOCT) | Irradiance 800W/m ² , ambient temperature 20°C, spectrum AM1.5G, wind speed 1m/s | | | | | |