

DMEGC
S O L A R
DM Series N Type
Bifacial Module
With Double Glass



DMEGC DM Series N Type Bifacial Module With Double Glass User Guide

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DMEGC DM Series N Type Bifacial Module With Double Glass



Product Information

Product Specifications

- **Type:** N-Type Bifacial Module with Double Glass
- **Model:** DMxxxM10RT-B54HBT/HST
- **Power Range:** 435 – 450 W
- **Max. Efficiency:** 22.5%
- **Cell Type:** N-type Mono-crystalline
- **Dimensions (mm):** 1762 x 1134 x 30
- **Weight:** 24.5 kg
- **Front Cover:** 2mm heat strengthened glass with anti-reflective coating
- **Rear Cover:** 2mm heat strengthened glass
- **Junction Box:** BNPI
- **Connector Type:** Cables

Product Usage Instructions

Bifacial Module Application

- Utilize the bifacial glass/glass modules to achieve up to 25% higher electricity yields due to active cell technology on both sides.

Better Performance

- Experience better performance on sunny and hot days with optimized temperature coefficients.

Excellent Low Light Performance

- Benefit from higher power output under low light conditions such as sunset, cloudy, or dawn.

Operating Conditions

- Operating Temperature: -40 to +85 °C
- Maximum System Voltage: 1500 DC (IEC)
- Overcurrent Protection Rating: 30 A
- Power Binning Tolerance: 0 / +5 W
- Protection Class: II
- Max. Test Load, Push/Pull: Snow 5400 / Wind 2400 Pa
- Max. Design Load, Push/Pull: 3600 / 1600 Pa

FAQ




Frequently Asked Questions

- **What is the warranty for the product?**
 - The product comes with a 25-year product warranty, specifically valid for modules installed in residential rooftop PV systems in Australia. Additionally, there is a 30-year linear power warranty.
- **Where is the product manufactured?**
 - The product is manufactured in China.

Specs

- **Power Range:** 435 – 450 W
- **Max. Efficiency:** 22.5 %

Features

-  **Bifacial Module Application**
 - Up to 25 % higher electricity yields due to active cell technology in bifacial glass/glass modules on both sides.
-  **Better Performance**
 - Our modules perform better on sunny and hot days thanks to its optimized temperature coefficient.
-  **Excellent Low Light Performance**

- Our modules can also provide higher power output under low light conditions, such as sunset, cloudy, or dawn.



- **Excellent Quality**

- More than 40 years' experience of manufacturing and intensive quality tests above the IEC standard ensures reliable modules and a secured investment.

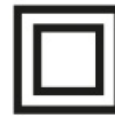


- **Assumption of Environmental, Social and Governance Responsibility (ESG)**

- DMEGC stands for his responsibility. Production is certified according to SA 8000 (ILO standards).

Certifications

- **SA 8000** ILO Standards. Social responsibility standards
- **ISO 9001** Quality management system
- **ISO 14001** Environmental management system
- **ISO 45001** Occupational health and safety management system
- **ISO 50001** Energy management system

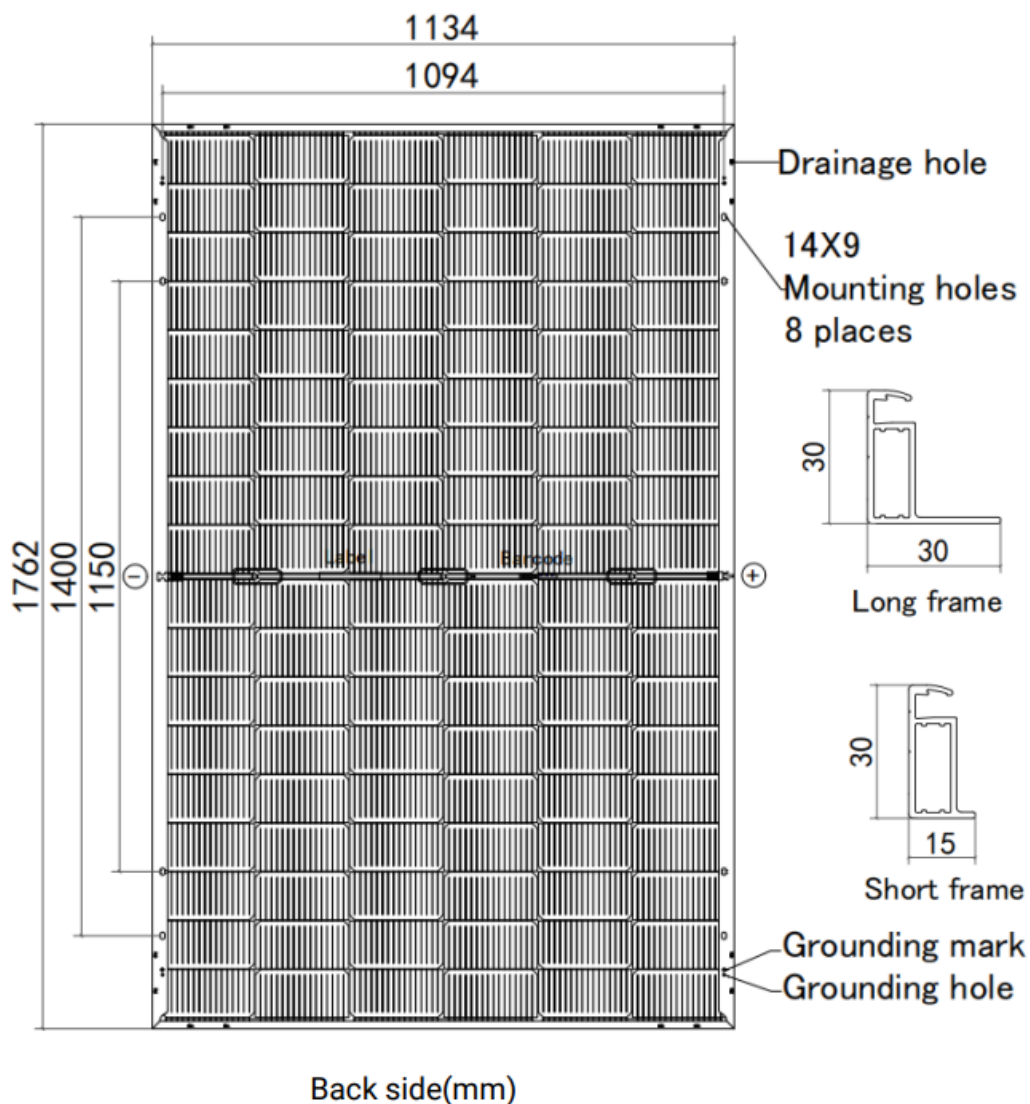


SolarPower
Europe
Member



Specification

Module Specification



Back side(mm)

- **Cell Type** N -type Mono-crystalline , 108 (6×18)
- **Dimensions (mm)** 1762 x 1134 x 30
- **Weight (kg)** 24.5
- **Front Cover** 2mm heat strengthened glass with anti -reflective coating
- **Rear Cover** 2mm heat strengthened glass
- **Junction Box** 3 Diodes, IP68 according to IEC 62790
- **Cables**
 - **4mm²/Portrait:** 350mm (+)/250mm(-)
 - **Landscape:** 1100mm(+)/1100mm(-)
 - Length can be customized
- **Connector Type**
 - **Sunter:** PV-ZH202B; Stäubli: PV-KST4-EVO2/xy_UR, PV-KBT4-EVO2/ xy_UR, PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy

Electrical Specifications¹

Module Type	DM435M10RT-B54HBT/HST		DM440M10RT-B54HBT/HST		DM445M10RT-B54HBT/HST		DM450M10RT-B54HBT/HST	
Testing Condition	STC ²	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power (Pmax/W)	435	479	440	484	445	490	450	495
Maximum Power Current (Imp/A)	13.33	14.39	13.40	14.47	13.47	14.54	13.54	14.62
Maximum Power Voltage (Vmp/V)	32.64	33.30	32.84	33.50	33.04	33.70	33.24	33.90
Short-circuit Current (Isc/A)	13.83	15.22	13.90	15.29	13.97	15.37	14.04	15.45
Open-circuit Voltage (Voc/V)	39.20	39.29	39.40	39.49	39.60	39.69	39.80	39.89
Module Efficiency STC (%)	21.8		22.0		22.3		22.5	

¹ Measurements according to IEC 60904-3, Measurement tolerance: Pmpp: ±3%, Isc: ±4%, Voc: ± 3%, Bifaciality: Pmpp: 80% ± 10%, Isc: 80% ± 10%, Voc: 100% ± 10%

² STC (Standard Test Condition): Radiation 1000 W/m², Module temperature 25°C, AM = 1.5

BIFACIAL OUTPUT – REARSIDE POWER GAIN

10 %	Pmax (STC)	479	484	490	495
20 %	Pmax (STC)	522	528	534	540
30 %	Pmax (STC)	566	572	579	585

Operating conditions

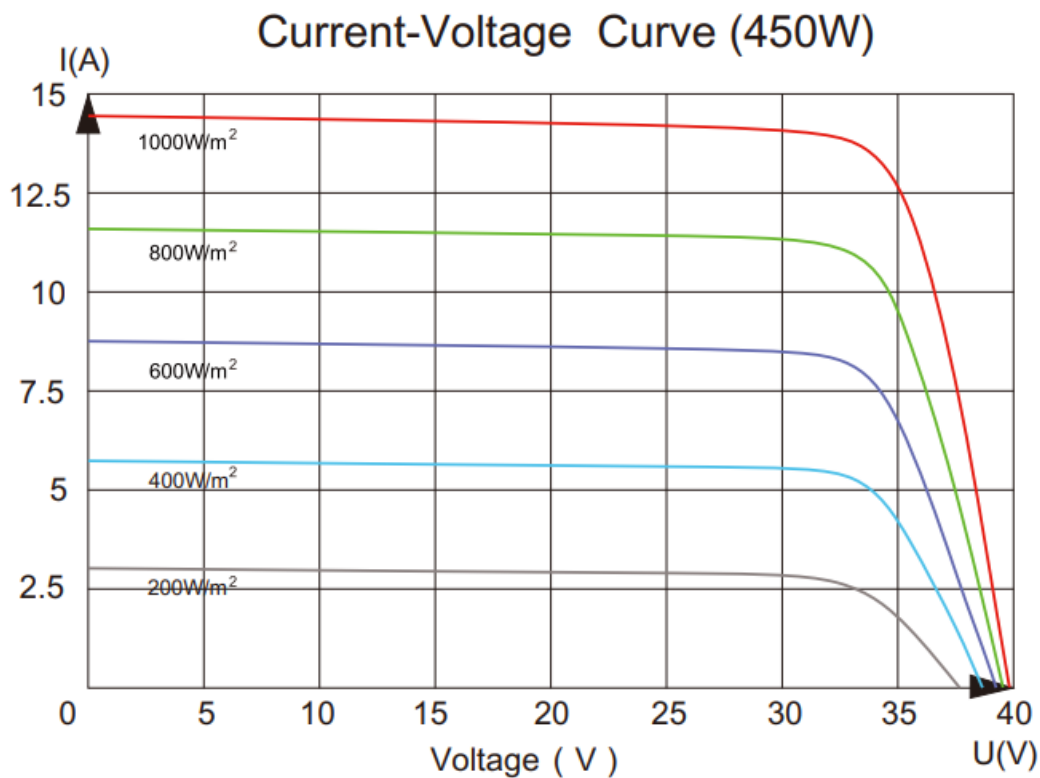
Operating conditions	
Operating Temperature (°C)	-40 to +85
Maximum System Voltage(V)	1500 DC (IEC)
Overcurrent protection rating (A)	30
Power Binning Tolerance (W)	0 / +5
Protection class	II
Max. Test Load, Push/Pull (Pa)	Snow 5400 / Wind 2400
Max. Design Load, Push/Pull (Pa)	3600 / 1600

Country of Manufacture China

Temperature Characteristics

- **Nominal Module Operating Temperature (NMOT)** 42 ± 2°C
- **Temperature Coefficient of Pmax (%/ °C)** -0.29
- **Temperature Coefficient of Voc (%/ °C)** -0.25
- **Temperature Coefficient of Isc (%/ °C)** +0.048

Current-Voltage Curve (450W)



Packaging

- **Container** 40' HQ
Pallet Dimensions(mm) 1800 × 1140 × 1250
- **Pieces per Pallet** 36
- **Pieces per Container** 936

Certification And Warranty

- **Certification:** IEC 61215, IEC 61730
- **WEEE Registration No.:** DE 50188598
- **Product Warranty:** 25 years
 - *25 years product warranty is only valid for this type of modules installed in residential rooftop PV systems in Australia.
- **Peak Power Warranty:** 30 years linear warranty
- **Fire Rating Class:** IEC Class C



- 1.) First year: min. 99 %.
- 2.) From the 2nd year: Max. 0.4 % degradation annually.
- 3.) Min. 87.4 % in the 30th year.

Statement: The installation instructions and the warranty conditions must be followed. Due to technological progress, product parameters will be adjusted accordingly. When signing the contract, the latest data of the company shall prevail.

Contact

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All information in this data sheet corresponds to EN 50380.Changes and errors excepted.

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Documents / Resources

	<p>DMEGC DM Series N Type Bifacial Module With Double Glass [pdf] User Guide DM Series N Type Bifacial Module With Double Glass, DM Series, N Type Bifacial Module With Double Glass, Bifacial Module With Double Glass, With Double Glass, Double Glass, Glass</p>
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References

- [DMEGC Solar](#)
- [User Manual](#)

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