



### N-Type Bifacial Module with Double Glass

# Type: DMxxxM10RT-B54HBB

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





#### Aesthetics

Designed with aesthetics in mind, the module blends harmoniously with the appearance of your house while producing high energy.



#### **Better Performance**

Our modules perform better on sunny and hot days thanks to its optimized temperature coefficient.







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).



#### **High-quality Service**

We provide a customer-oriented and localized services, covering pre-sale, sale and after-sales.

### 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



















## DMxxxM10RT-B54HBB





#### **Electrical Specifications**<sup>1</sup>

Module Type	DM435M10RT-B54HBB		DM440M10RT-B54HBB		DM445M10RT-B54HBB		DM450M10RT-B54HBB	
Testing Condition	STC <sup>2</sup>	NMOT <sup>3</sup>	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	435	327	440	331	445	335	450	339
Maximum Power Current (Imp/A)	13.33	10.78	13.40	10.83	13.47	10.89	13.54	10.95
Maximum Power Voltage (Vmp/V)	32.64	30.49	32.84	30.67	33.04	30.86	33.24	31.05
Short-circuit Current (Isc/A)	13.83	11.14	13.90	11.19	13.97	11.25	14.04	11.31
Open-circuit Voltage (Voc/V)	39.20	37.13	39.40	37.32	39.60	37.51	39.80	37.70
Module Efficiency STC (%)	2'	1.8	22	2.0	22	.3	22	.5

<sup>1</sup> Measurements according to IEC 60904-3, Measurement tolerance: ISC: ±4%,VOC: ± 3%, Bifaciality: 80% ± 5%

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

<sup>3</sup> NMOT: Radiation 800 W/m<sup>2</sup>, Ambient temperature 20°C, AM = 1.5, Wind Speed 1 m/s

#### **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

#### **Certifications and Warranty**

	IEC 61215, IEC 61730		
	Ammonia Corrosion Test: IEC 62716		
Certifications	Salt Mist Corrosion Test: IEC 61701		
	PID (IEC TS 62804); LeTID (IEC TS 63342)		
	Dust & Sand (IEC 60068)		
WEEE Registration No.	DE 50188598		
Product Warranty	25 years		
Peak Power Warranty	30 years linear warranty		

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

#### **Operating conditions**

Operating Temperature ( $^\circ \mathbb{C}$ )	-40 to +85		
Maximum System Voltage(V)	1500 DC (IEC)		
Overcurrent protection rating (A)	30		
Power Performance Tolerance (%)	0 / +3		
Protection class	II		
Max. Test Load, Push/Pull (Pa)	Snow 5400 / Wind 2400		
Max. Design Load, Push/Pull (Pa)	3600 / 1600		

Backside(mm)

#### **Temperature Characteristics**

Nominal Module Operating Temperature (NMOT)	<b>42 ± 2</b> ℃
Temperature Coefficient of Pmax (%/ $^\circ C$ )	-0.29
Temperature Coefficient of Voc (%/ $^\circ C$ )	-0.25
Temperature Coefficient of Isc (%/ $^\circ\!\!\!\!\!^{ m C}$ )	+0.048

#### Packaging

	Container	40' HQ
	Pallet Dimensions(mm)	$1800 \times 1140 \times 1250$
	Pieces per Pallet	36
	Pieces per Container	936

#### Current-Voltage Curve (450W) I(A) 15 1000W 12.5 800W/m<sup>3</sup> 10 600W/m<sup>2</sup> 7.5 400W/r 5 2.5 200W 25 20 35 0 5 10 15 30 40 U(V) Voltage (V)

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.



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