METAWOLF SOLAR

BlackLux Clear

MW-SP445-2RB96DFT-10

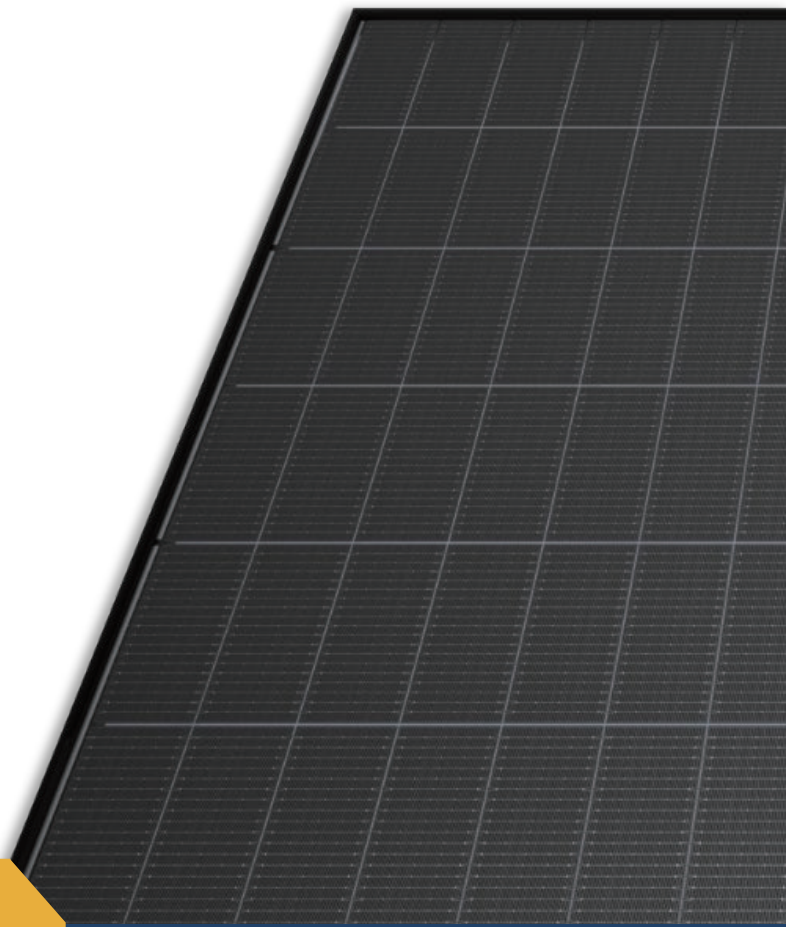
N-Type HJT
Clear Mesh Double Glass

445W Power

22.27% Efficiency

30 Yrs PRODUCT WARRANTY

30 Yrs LINEAR POWER WARRANTY



Exceeds the requirements of hail resistance 4 (HW4) confirmed by TÜV Süd

2 X2 mm Glass Front and Back

· Better hail resistance with 45 mm ice ball at 110 km/h
vs IEC Standard: 25 mm ice ball at 83 km/h

· Higher snow load and wind load resistance with tested up to 6336 pa (Front) and 5530 pa (Rear)
vs IEC Standard: 5400 pa (Front) and 2400 pa (Rear)

HJT Technology

Combining gettering process and double-sided µc-Si to maximize cell efficiency and module power.

Butyl Edge Sealing

· Zero water ingress → zero corrosion
· Superb durability for a longer lifespan

Up to 95% Bifaciality

vs PERC: 70%.
vs TOPCon: 80%

Electrical Characteristics (STC*)

Module Type	MW-SP445-2RB96DFT-10
Maximum Power (Pmax)	445W
Module Efficiency	22.27%
Maximum Power Voltage (Vmp)	30.72V
Maximum Power Current (Imp)	14.49A
Open Circuit Voltage (Voc)	36.62V
Short Circuit Current (Isc)	15.42A
Operating Temperature	-40°C to + 85 °C
Maximum System Voltage	DC1500V(IEC)
Maximum Series Fuse Rating	30A
Power Tolerance	0 ~ +5W
Bifaciality	>90% ± 5%

*STC: Irradiance 1000 W/m², cell temperature 25°C, AM=1.5. Tolerance of Pmax is within+/- 3%.

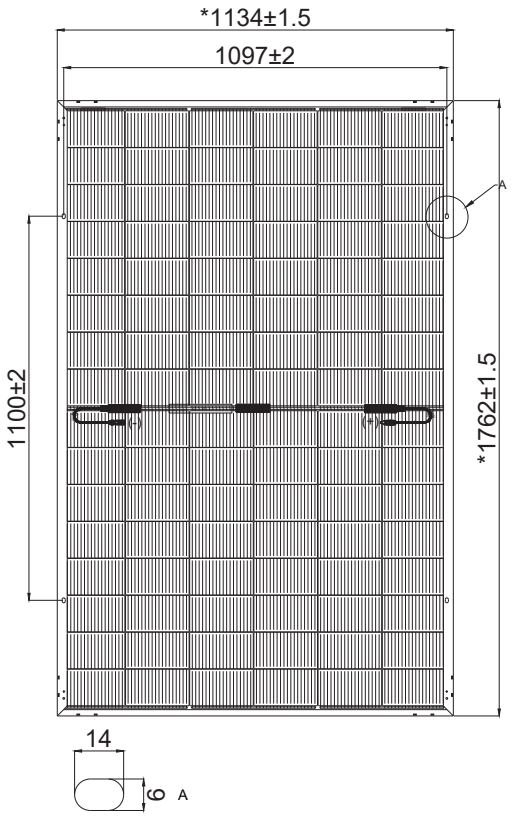
BSTC**

Module Type	MW-SP435-8B108DFT-10
Maximum Power (Pmax)	499W
Maximum Power Voltage (Vmp)	30.83V
Maximum Power Current (Imp)	16.19A
Open Circuit Voltage (Voc)	36.75V
Short Circuit Current (Isc)	17.29A

**BSTC: Front side irradiation 1000W/m², back side reflection irradiation 135W/m², AM=1.5, ambient temperature 25 °C.

Engineering Drawings

Unit: mm



Mechanical Characteristics

Cell Type	HJT Mono 182×105mm
Cell Connection	96 (6×16)
Module Dimension	1,762×1134×30 mm
Weight	24.7kg
Junction Box	IP68
Output Cable	4mm², 1,250mm in length, length can be customized / UV resistant
Connectors Type	MC4 original
Frame	Anodised aluminum alloy (Black)
Front Load	5,400Pa
Rear Load	2,400Pa
Glass Thickness	Double glass, 2.0mm

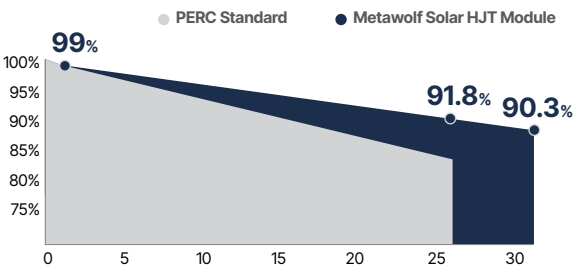
Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44°C±2°C
Temperature Coefficient of Pmax	-0.24%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	0.04%/°C

Safety & Warranty

Safety Class	Class II
Product Warranty	30 yrs Workmanship (For Rooftop Installation)*
Performance Warranty	30 yrs Linear Warranty*

*Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.3%, and the power is no less than 90.3% until the 30th year.



*Refer to Metawolf Solar standard warranty for details.

Shipping Configurations

Container Size	40'HQ
Pallets Per Container	26
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	936

* The module recycling should be carried out by the professional institutions at the end of module life cycle
* Copyright@2023 Specifications are subject to change without further notification

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