

ClearFlex

MW-SP430ND54F-10

430W

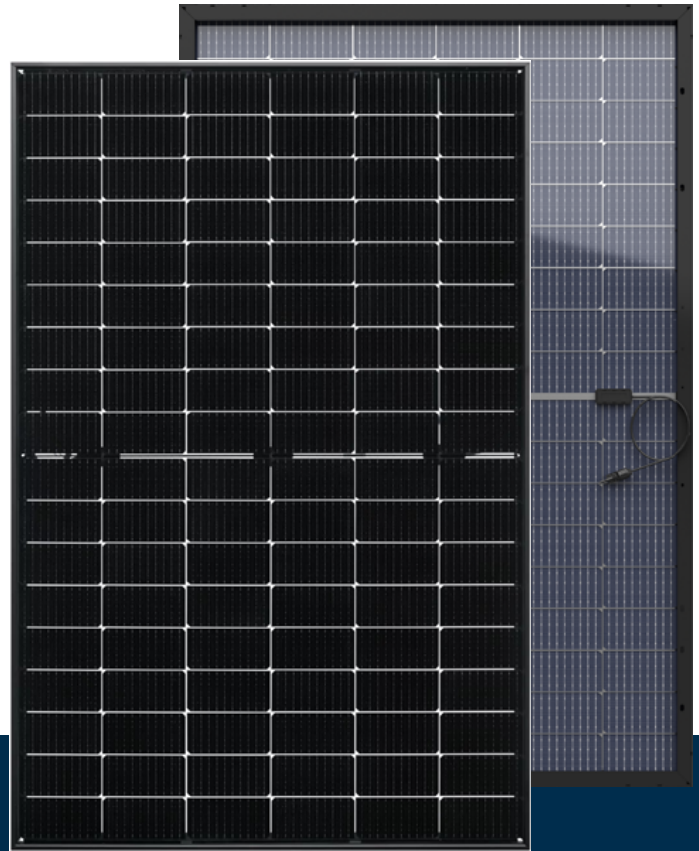
25
Yrs

**PRODUCT
WARRANTY**

For Rooftop Installations

30
Yrs

**LINEAR POWER
WARRANTY**



Features of the Module



TOPCon Technology

Using a ultra-thin tunnel oxide layer to reduces energy loss in recombination, leading to higher efficiency.



Up to 85% Bifaciality

vs PERC: 70%.



22.02% Module Efficiency

5% higher than PERC.



Double Glass for Superior Durability

Glass on both sides for better protection.
Fire class A for better fireproof.



Low Decay Rate

< 1% in the 1st Year.
< 4% annual degradation from 2-30 years.

Electrical Characteristics (STC*)

Module Type	MW-SP430ND54F-10
Maximum Power(Pmax)	430W
Open Circuit Voltage(Voc)	38.3V
Short Circuit Current(Isc)	14.23A
Maximum Power Voltage(Vmp)	31.9V
Maximum Power Current(Imp)	13.50A
Module Efficiency	22.0%
Power Tolerance	0 ~ +3%
Maximum System Voltage	1500V DC(IEC)
Maximum Series Fuse Rating	25A
Operating Temperature	-40 °C to +85 °C

*STC: AM 1.5, Irradiance 1000W/m², module temperature 25°C.

Bifacial Output-rearside Power Gain

5%	Maximum Power(Pmax)	452W
	Module Efficiency	23.1%
15%	Maximum Power(Pmax)	495W
	Module Efficiency	25.3%
25%	Maximum Power(Pmax)	538W
	Module Efficiency	27.5%

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

Electrical Characteristics (NMOT)

Module Type	MW-SP430ND54F-10
Maximum Power(Pmax)	327W
Open Circuit Voltage(Voc)	36.8V
Short Circuit Current(Isc)	11.47A
Maximum Power Voltage(Vmp)	30.6V
Maximum Power Current(Imp)	10.69A

* NMOT : Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Normal Module Operation Temperature(NMOT)	43±2°C	
Temperature Coefficient of Pmax	γ(Pm)	-0.31%/°C
Temperature Coefficient of Voc	β(Voc)	-0.25%/°C
Temperature Coefficient of Isc	α(Isc)	0.046%/°C

Solar Cells

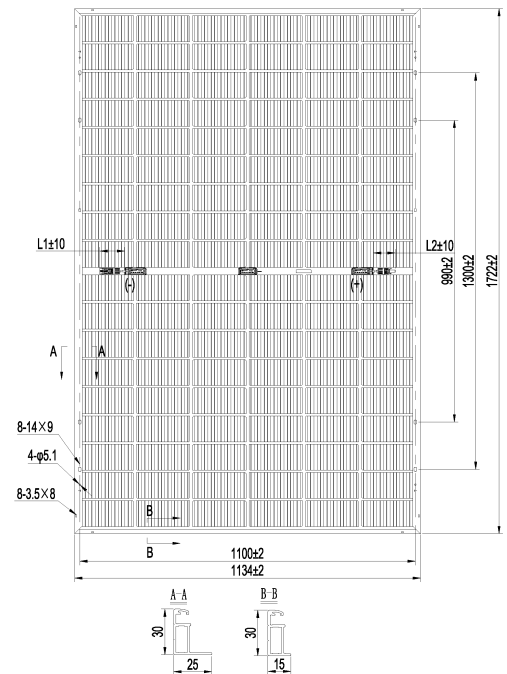
Monocrystalline 182×91mm

No. of Cells	108 (6×18)
Dimensions	1722mm×1134mm×30mm
Weight	24.0(±0.5)kg
Front Glass	High transmission coated tempered glass/Heat strength glass
Frame	Anodized aluminum alloy
Junction Box	IP68
Cable	4mm ² (IEC) length: (+) 200mm (-) 300mm
Connectors	MC4 / MC4 Compatible
Packaging Configuration	36 pcs/box: 936 pcs/ 40' HQ Container

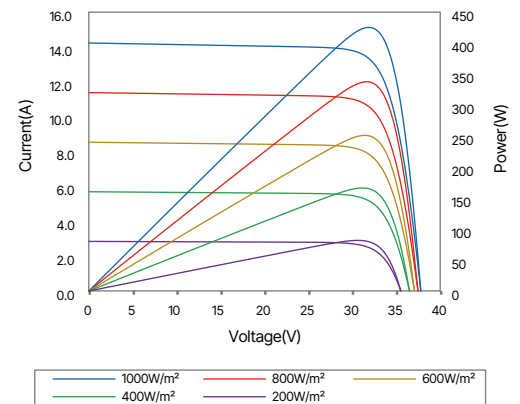
* The module recycling should be carried out by the professional institutions at the end of module life cycle
* Copyright@2023 Specifications are subject to change without further notification

Engineering Drawings

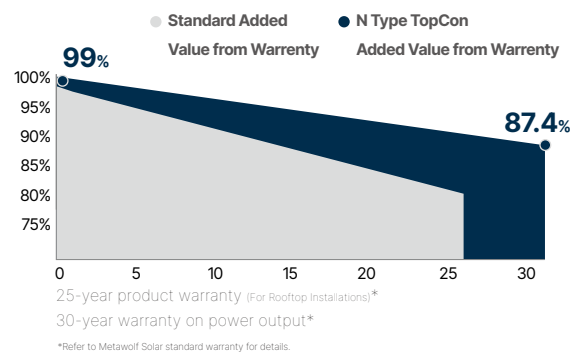
Unit: mm



I-V Curve



Warranty



*Refer to Metawolf Solar standard warranty for details.