

**0~+3 W**

**POSITIVE TOLERANCE**

Positive tolerance of up to 3W delivers higher output reliability.

**450W**

**POWER OUTPUT**

Monocrystalline Module

**4mm<sup>2</sup> cable 55cm**

**OUTPUT CABLES**

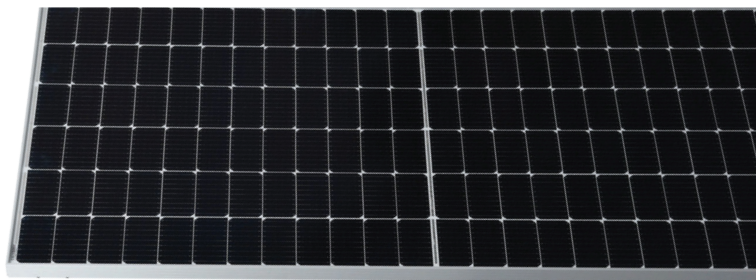
Including MC4 connector

**20.70%**

**MODULE EFFICIENCY**

half-cell designs improves the module's performance and durability.

## Mono Half Solar Panel



**10 YEAR**

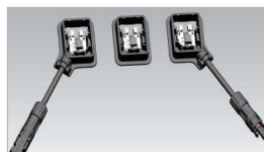
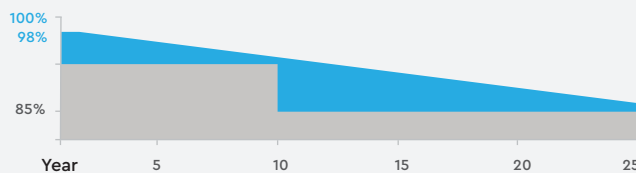
**WARRANTY**

PRODUCT MATERIAL AND WORKMANSHIP

**25 YEAR**

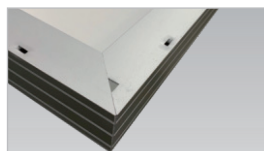
**WARRANTY**

LINEAR POWER OUTPUT



### JUNCTION BOX

WATERPROOF PROTECTION GRADE: IP67/IP68  
SAFETY LEVEL: CLASS II  
MAXIMUM SYSTEM VOLTAGE: 1500V  
OUTSTANDING WATERPROOF LEVEL.  
EFFECTIVELY RESIST HARSH ENVIRONMENTS



### FRAME

STRONG MACHINICAL LOAD  
RESISTANCE UP TO 5400PA  
ANODIC OXIDATION LAYER RESISTANT TO  
CHEMICAL CORROSION AVAILABLE  
IN SILVER AND BLACK



### HALF-CUT TECHNOLOGY

New Circuit Design, Lower Internal Current And Lower Internal Resistance Loss



### SIGNIFICANTLY AVOIDING HEAT SPOT

The unique circuit design to reduce the temperature Of heat spot significantly,so that to reduce the power loss And then increase the output of modules.



### LOWER COST

Increasing power generation can reduce the cost per kilowatt-hour

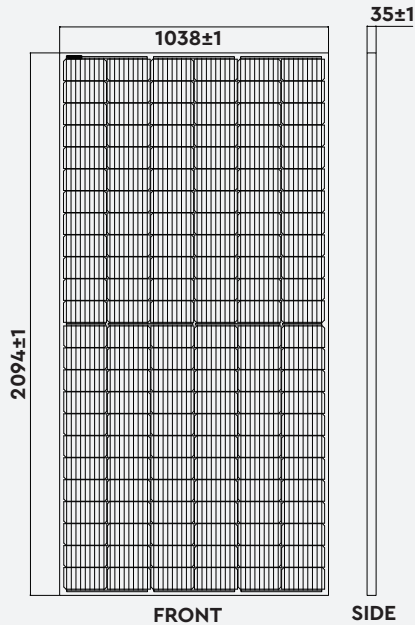


### EXCELLENT PERFORMANCE OF PID RESISTANCE

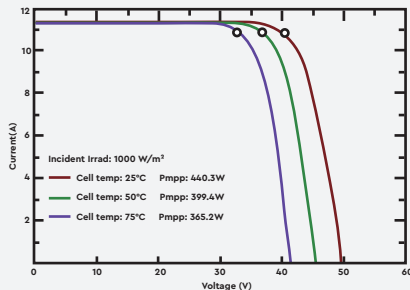
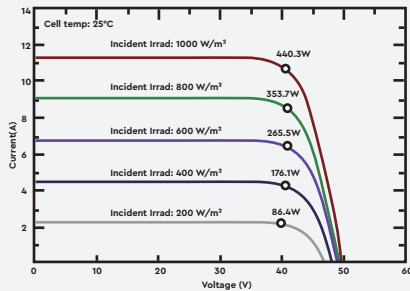
The performance of PID resistance(Potential Induced Degradation) passed the standard of TUV Nord.



## DRAWING AND DIMENSION CURVE



## IV CURVE



## LISTING DETAILS

Model No: VT-450W  
SKU Code: 11353  
EAN Code: 3800157682213

## MASTER BOX PACKAGING

Qty Per Pallet: 31pcs/pallet

## ELECTRICAL DATA (STC)

Peak Power(P <sub>max</sub> )	450.00
Maximum Power Voltage(V <sub>mp</sub> )	41.50
Maximum Power Current(I <sub>mp</sub> )	10.85
Open Circuit Voltage(V <sub>oc</sub> )	49.30±3%
Short Circuit Current(I <sub>sc</sub> )	11.60±3%
Module Efficiency( % )	20.70

## ELECTRICAL DATA (NOCT)

Peak Power(P <sub>max</sub> )	336.10
Maximum Power Voltage(V <sub>mp</sub> )	38.60
Maximum Power Current(I <sub>mp</sub> )	8.70
Open Circuit Voltage(V <sub>oc</sub> )	46.20±3%
Short Circuit Current(I <sub>sc</sub> )	9.38±3%

## TEMPERATURE & MAXIMUM RATING

Maximum System Voltage V)	1500 V
Maximum Series Fuse Rating A)	20 A
Power Tolerance	0~+3 W
P <sub>max</sub> Temperature Coefficient (W/°C)	-0.350 %/°C
V <sub>oc</sub> Temperature Coefficient (V/°C)	-0.270 %/°C
I <sub>sc</sub> Temperature Coefficient (A/°C)	+0.048 %/°C
NOCT Nominal Operating Cell Temperature (°C)	45±2°C
Operating and Storage Temperature (°C)	-40~+85°C

## MECHANICAL CHARACTERISTICS

Cell Type	166*83 Mono
No. of Cells	144 (12*12)
Dimensions	2094*1038*35mm
Weight	23.50kg
Front Glass	3.2mm high transmission, low iron, tempered glass
Frame	Anodized Aluminium Alloy
Junction box	IP67/IP68 3diodes
Output cables	4mm <sup>2</sup> cable 55cm (Including MC4 connector)
MaxWind Load/Snow Load	2400Pa/5400Pa