



# SOLAR ENERGY

## 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

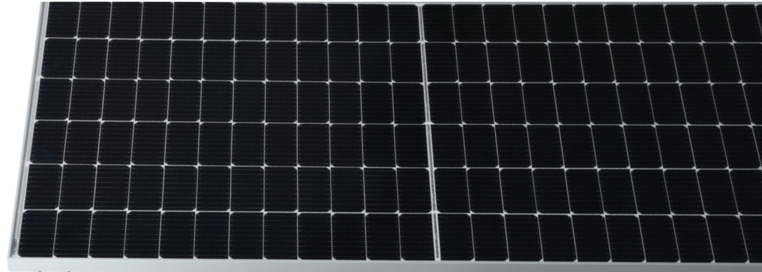
Inlcuding MC4 connector

## 20.70%

### MODULE EFFICIENCY

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

## Mono Half Solar Panel



## 10 YEAR

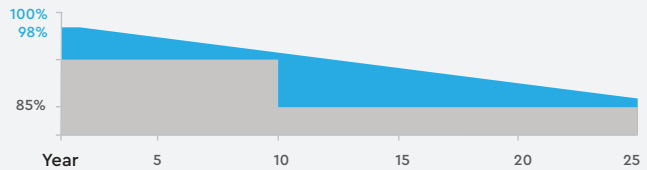
### WARRANTY

PRODUCT MATERIAL AND WORKMANSHIP

## 25 YEAR

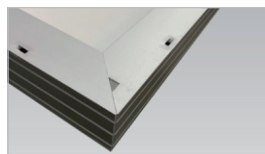
### WARRANTY

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.

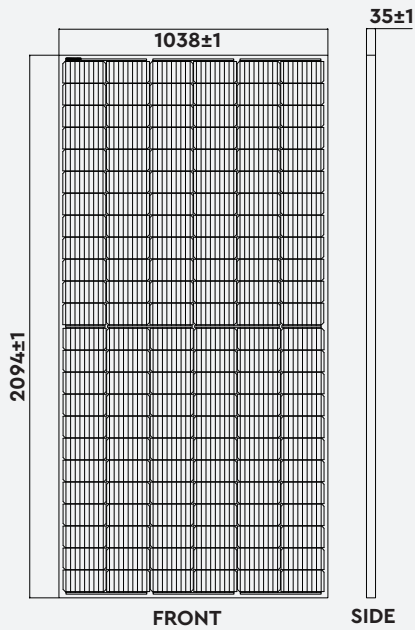


SOLD IN OVER  
**70** COUNTRIES

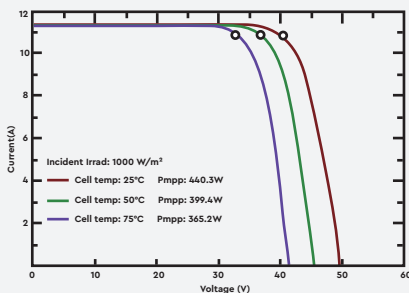
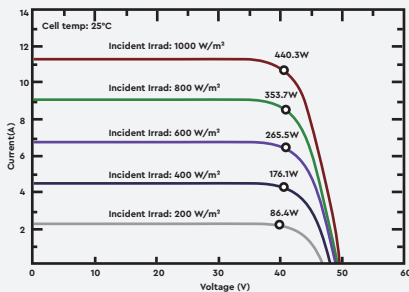
[www.vtacexports.com](http://www.vtacexports.com)

ONE BRAND, ENDLESS SOLUTIONS.

## DRAWING AND DIMENSION CURVE



## IV CURVE



## LISTING DETAILS

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

## MASTER BOX PACKAGING

Qty Per Pallet: 31pcs/pallet

## ELECTRICAL DATA (STC)

Peak Power(Pmax)	450.00
Maximum Power Voltage(Vmp)	41.50
Maximum Power Current(Impp)	10.85
Open Circuit Voltage(Voc)	49.30±3%
Short Circuit Current(Isc)	11.60±3%
Module Efficiency( % )	20.70

## ELECTRICAL DATA (NOCT)

Peak Power(Pmax)	336.10
Maximum Power Voltage(Vmp)	38.60
Maximum Power Current(Impp)	8.70
Open Circuit Voltage(Voc)	46.20±3%
Short Circuit Current(Isc)	9.38±3%

## TEMPERATURE & MAXIMUM RATING

Maximum System Voltage V)	1500 V
Maximum Series Fuse Rating A)	20 A
Power Tolerance	0~+3 W
Pmax Temperature Coefficient (W/°C)	-0.350 %/°C
Voc Temperature Coefficient (V/°C)	-0.270 %/°C
Isc 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