



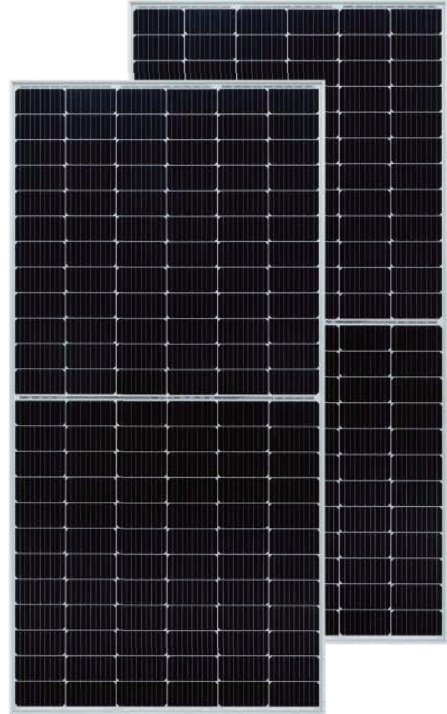
# 166 PERC

## ZHONGXING

### 144 half-cell

### 435-455W

### 9BB half-cut mono perc



#### KEY FEATURES



##### 9BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss  
Ga doped wafer, attenuation <2% (1st year) / ≤0.45% (Linear)



##### Industry leading high yield

Bifacial PERC cell technology,  
5%-25% more yield depends on different conditions



##### Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



##### Wider application

No water-permeability and high wear-resistance,  
can be widely used in high-humid, windy and dusty area



##### IP68 junction box

High waterproof level

#### SYSTEM & PRODUCT CERTIFICATES

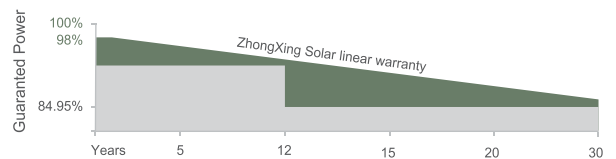
- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015
- CE
- TUV



#### PERFORMANCE WARRANTY



- Linear Performance Warranty
- Standard Performance Warranty





### ELECTRICAL PARAMETERS

Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	435	440	445	450	455
Operating Voltage (Vmpp/V)	40.3	40.5	40.7	40.9	41.3
Operating Current (Impp/A)	10.80	10.87	10.94	11.01	11.02
Open-Circuit Voltage (Voc/V)	49.0	49.2	49.2	49.3	49.3
Short-Circuit Current (Isc/A)	11.33	11.40	11.47	11.54	11.66
Module Efficiency ηm(%)	20.0	20.2	20.4	20.7	20.9

Performance at NMOT

Maximum Power (Pmax/W)	324	328	332	335	339
Operating Voltage (Vmpp/V)	37.6	37.8	38.0	38.2	38.4
Operating Current (Impp/A)	8.62	8.67	8.73	8.78	8.84
Open-Circuit Voltage (Voc/V)	45.6	45.8	46.0	46.2	46.4
Short-Circuit Current (Isc/A)	9.15	9.20	9.26	9.32	9.37

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

### MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	166*166mm
Cell Arrangement	144 (6*24)
Weight	22.4kg
Module Dimensions	20948*1038*35mm
Cable Length (Portrait)	300mm
Cable Cross Section Size	TUV: 4mm <sup>2</sup> (0.006inches <sup>2</sup> )/UL: 12AWG
Glass	3.2mm AR Coating Semi-tempered Glass
No. of Bypass Diodes	3
Packing Configuration	30pcs/carton
Frame	Anodized Aluminium Alloy
Junction Box	IP68

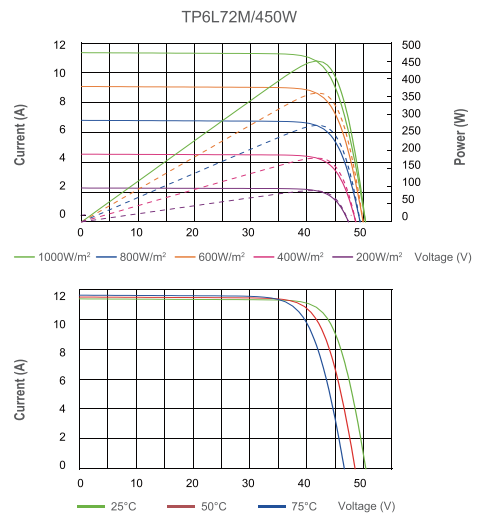
### OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2

### TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C

### I-V CURVE



### TECHNICAL DRAWINGS

