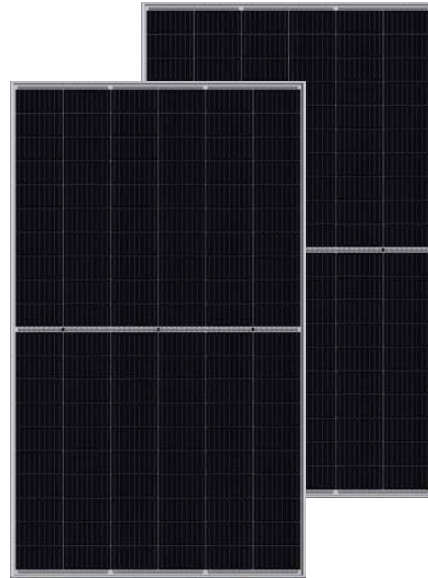


# CIPRO

TP6F60M  
TP6F60M(H) **120 half-cell**

**320 - 340W**

9BB half-cut cast mono



## KEY FEATURES



### 9BB Half-cut cell technology

New circuit design, lower internal current, lower Rs loss



### Significantly lower the risk of hot spot

Special circuit design with much lower hot spot temperature



### Lower LCOE

2% more power generation, lower LCOE



### Excellent Anti-PID performance

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



### IP68 junction box

High waterproof level

## SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems

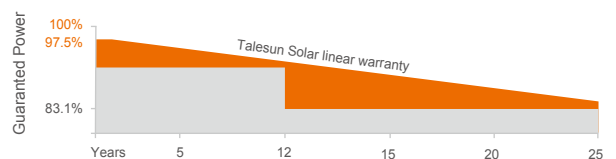


## PERFORMANCE WARRANTY



Linear Performance Warranty

Standard Performance Warranty



## ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	320	325	330	335	340
Operating Voltage (Vmpp/V)	33.5	33.8	34.1	34.4	34.7
Operating Current (Impp/A)	9.55	9.61	9.66	9.74	9.80
Open-Circuit Voltage (Voc/V)	40.1	40.3	40.5	40.7	40.9
Short-Circuit Current (Isc/A)	9.99	10.06	10.12	10.18	10.24
Module Efficiency $\eta$ m(%)	18.9	19.2	19.5	19.8	20.1

### Performance at NMOT

Maximum Power (Pmax/W)	237	241	244	248	251
Operating Voltage (Vmpp/V)	31.3	31.5	31.7	31.9	32.2
Operating Current (Impp/A)	7.61	7.67	7.71	7.78	7.83
Open-Circuit Voltage (Voc/V)	37.3	37.5	37.6	37.8	38.0
Short-Circuit Current (Isc/A)	8.06	8.12	8.17	8.22	8.27

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	Cast Monocrystalline
Cell Dimensions	158.75*158.75mm
Cell Arrangement	120 (6*20)
Weight	20.7kg (45.64lbs)
Module Dimensions	1684*1002*35mm (66.30*39.45*1.38inches)
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm <sup>2</sup> (0.006inches <sup>2</sup> )/UL: 12AWG
Front Glass	3.2mm High Transmission, Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	31pcs/carton, 806pcs/40hq
Packing Configuration (2)	31+4pcs/carton, 858pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

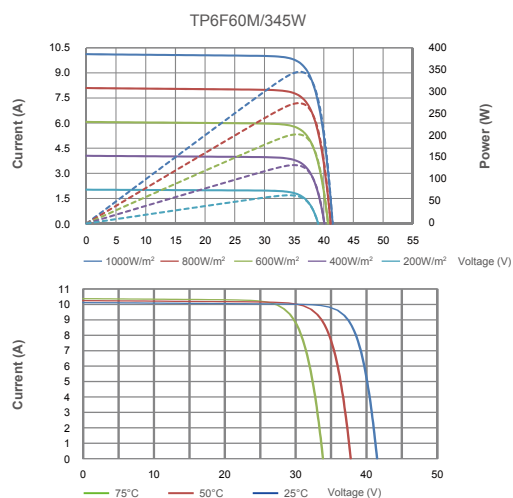
## OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
Static Loading	5400pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible

## 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

