

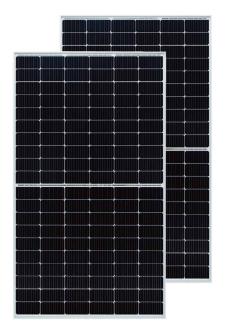
# **BISTAR**

TP7F60M TP7F60M(H)

120 half-cell

440 - 460W

10BB half-cut mono perc



#### **KEY FEATURES**



### 10BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss Ga dopped wafer, attenuation < 2% (1st year) / ≤0.55% (Linear)



#### 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 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems







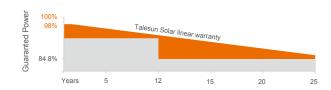
# PERFORMANCE WARRANTY











ELECTRICAL PARAMETERS					
Performance at STC (Power Tolerance 0 ~ +3%)					
Maximum Power (Pmax/W)	440	445	450	455	460
Operating Voltage (Vmpp/V)	34.35	34.53	34.70	34.87	35.04
Operating Current (Impp/A)	12.81	12.89	12.97	13.05	13.13
Open-Circuit Voltage (Voc/V)	40.99	41.16	41.33	41.50	41.67
Short-Circuit Current (Isc/A)	13.69	13.78	13.86	13.94	14.02
Module Efficiency ηm(%)	20.3	20.6	20.8	21.0	21.3
Performance at NMOT					
Maximum Power (Pmax/W)	328	332	336	339	343
Operating Voltage (Vmpp/V)	32.1	32.2	32.4	32.6	32.7
Operating Current (Impp/A)	10.23	10.30	10.36	10.42	10.49
Open-Circuit Voltage (Voc/V)	38.6	38.7	38.9	39.1	39.2
Short-Circuit Current (Isc/A)	11.04	11.11	11.17	11.24	11.30

Monocrystalline

MECHANICAL SPECIFICATION
Cell Type
Cell Dimensions

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5

Cell Dimensions182\*182mmCell Arrangement120 (6\*20)Weight24.3kg (53.6lbs.)Module Dimensions1908\*1134\*35mm (75.12\*44.65\*1.38inches)Cable LengthPortrait 300mm/Landscape 1200mm/CustomizedCable Cross Section SizeTUV: 4mm² (0.006inches²)/UL: 12AWGFront Glass3.2mm (0.13inches) AR Coating Tempered Glass

No. of Bypass Diodes 3
Packing Configuration (1) 31pcs/carton, 744pcs/40hq

Packing Configuration (for USA) 31pcs/carton, 744pcs/40hq
Frame Anodized Aluminium Alloy

Junction Box IP68

# **OPERATING CONDITIONS**

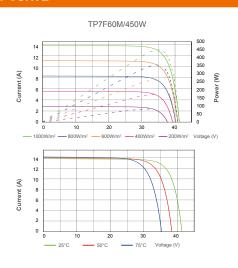
Maximun System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2

# **TEMPERATURE COEFFICIENT**

Temperature Coefficient Pmax	-0.35%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.048%/°C
NMOT	43±2°C

# I-V CURVE

NMOT: Irradiance at  $800W/m^2$ , Ambient Temperatue  $20^{\circ}C$ , Air Mass AM1.5, Wind Speed 1m/s



# **TECHNICAL DRAWINGS**

