

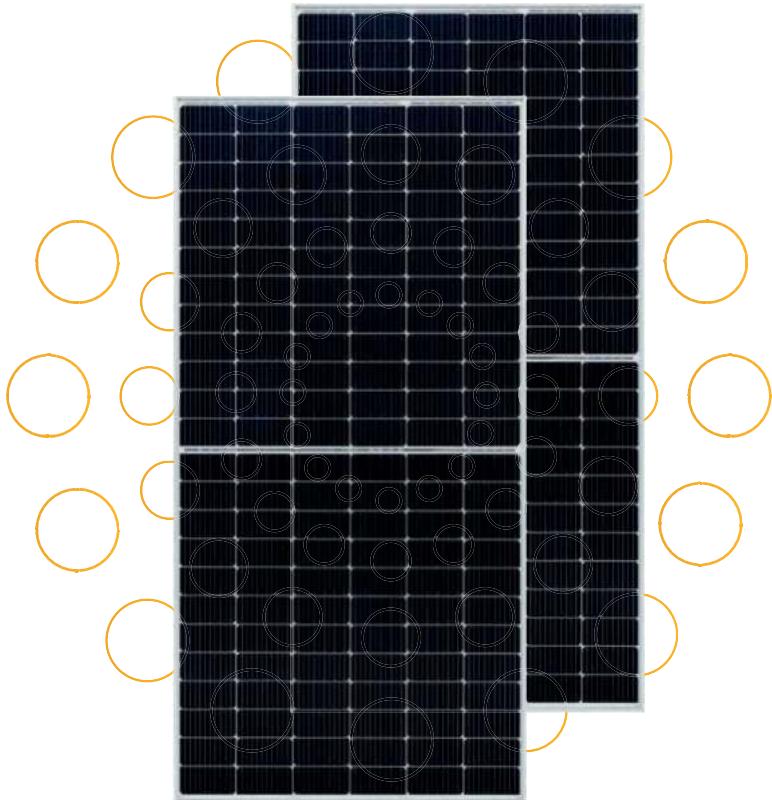
TPOWER

TS55058A

144 half-cell

BISTAR 540 - 560W

half-cut mono perc



KEY FEATURES



Half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga-doped 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

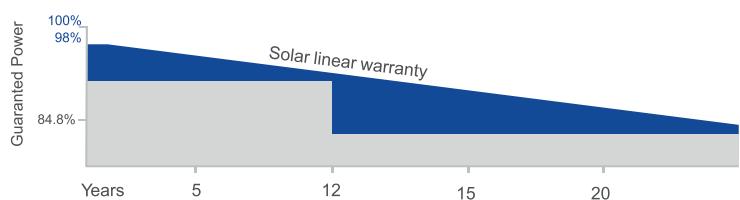


PERFORMANCE WARRANTY

12 years
Quality assurance

25 years
Power output guarantee

Linear Performance Warranty
Standard Performance Warranty



ELECTRICAL PARAMETERS

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

| | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W) | 540 | 545 | 550 | 555 | 560 |
| Operating Voltage (Vmpp/V) | 41.9 | 42.0 | 42.1 | 42.2 | 42.3 |
| Operating Current (Impp/A) | 12.89 | 12.98 | 13.07 | 13.16 | 13.25 |
| Open-Circuit Voltage (Voc/V) | 49.7 | 49.8 | 49.9 | 50.0 | 50.1 |
| Short-Circuit Current (Isc/A) | 13.62 | 13.71 | 13.80 | 13.89 | 13.98 |
| Module Efficiency ηm(%) | 21.1 | 21.3 | 21.5 | 21.6 | 21.7 |

Performance at NMOT

| | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (Pmax/W) | 402 | 405 | 409 | 413 | 417 |
| Operating Voltage (Vmpp/V) | 39.0 | 39.1 | 39.2 | 39.3 | 39.4 |
| Operating Current (Impp/A) | 10.30 | 10.37 | 10.44 | 10.51 | 10.58 |
| Open-Circuit Voltage (Voc/V) | 46.5 | 46.6 | 46.7 | 46.8 | 46.9 |
| Short-Circuit Current (Isc/A) | 10.98 | 11.05 | 11.12 | 11.19 | 11.26 |

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

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

MECHANICAL SPECIFICATION

| | |
|---------------------------------|---|
| Cell Type | Monocrystalline |
| Cell Dimensions | 182*182mm |
| Cell Arrangement | 144 (6*24) |
| Weight | 29kg (63.9lbs.) |
| Module Dimensions | 2261*1134*30mm(89.02*44.65*1.18inches) |
| Cable Length | Portrait 300mm/Landscape 1200mm/Customized |
| Cable Cross Section Size | TUV: 4mm ² (0.006inches ²)/UL: 12AWG |
| Front Glass | 3.2mm (0.13inches) AR Coating Tempered Glass |
| No. of Bypass Diodes | 3/6 |
| Packing Configuration (1) | 36pcs/carton,720pcs/40hq |
| Packing Configuration (for USA) | 36pcs/carton,720pcs/40hq |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68 |

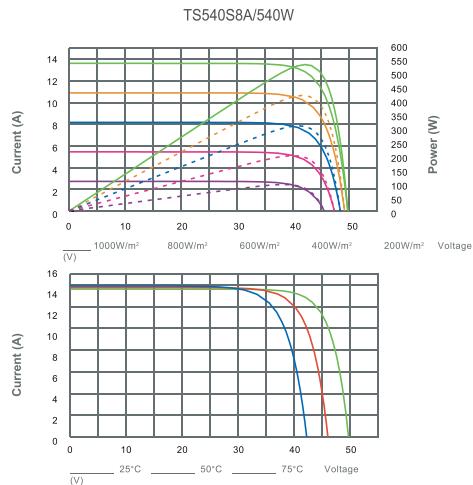
OPERATING CONDITIONS

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

I-V CURVE



TECHNICAL DRAWINGS

