

Silver Series

TPC-72HC

Product Range

535-560W

PERC Monocrystalline
Half-Cut Solar Module



560W
Maximum Power Output

0~+5W
Positive Power Tolerance

21.67%
Maximum Efficiency

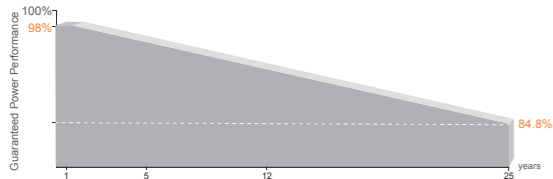
Linear Performance Warranty

12 Year Product Warranty

25 Year Linear Power Warranty

<1% First year Power Degradation

<0.55% Year 2-25 Power Degradation



Certifications

Quality Management System and Product Certification.

IEC61215(2021), IEC61730(2023), IEC61701

IEC61215-2 (bifaciality): 2021

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational health and safety management systems



MBB Half-Cut Solar Cell

182x91mm, 144 cells.

Higher Module Conversion Efficiency

Higher module output up to 560W with module efficiency up to 21.67%.

Low-Light Performance

Advanced glass and surface texturing allow for excellent performance in low-light environments.

Light-Weight Design

Light-weight design using transparent backsheet for easy installation and low BOS cost.

Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

182mm SERIES, 72-CELL HALF-CUT SERIES

ELECTRICAL PERFORMANCE

| | |
|---|---|
| Module Type: TPC-72HC | 535M / 540M / 545M / 550M / 555M / 560M |
| Maximum Power(Wp) | 535W 540W 545W 550W 555W 560W |
| Open Circuit Voltage(Voc) | 49.35V 49.50V 49.65V 49.80V 50.02V 50.10V |
| Short Circuit Current(Isc) | 13.78A 13.85A 13.92A 13.98A 14.07A 14.11A |
| Maximum Power Voltage(Vm) | 41.50V 41.65V 41.80V 41.95V 42.11V 42.26V |
| Maximum Power Current(Imp) | 12.90A 12.97A 13.04A 13.12A 13.18A 13.25A |
| Module Efficiency | 20.7% 20.9% 21.1% 21.3% 21.5% 21.67% |
| Maximum Series Fuse | 25A |
| Watts Positive Tolerance | 0~+5W |
| Number Of Diode | 3 |
| Standard Test Conditions | 1000W/M ² ,25°C,AM1.5 |
| Maximum System Voltage | 1500V/DC |
| Temperature-Coefficient Isc | +0.048%/°C |
| Temperature-Coefficient Voc | -0.270%/°C |
| Temperature-Coefficient Pmpp | -0.350%/°C |
| Operating Temperature | -40°C...+85°C |
| Normal Operating Cell Temperature | 45±2°C |
| Load Capacity For The Cover Of The Module (Glass) | 5400Pa(IEC61215)(snow) |
| Load Capacity For The Front & Back Of The Module | 2400Pa(IEC61215)(wind) |

ELECTRICAL PERFORMANCE (NOCT)

| | |
|----------------------------|---|
| Module Type: TPC-72HC | 535M / 540M / 545M / 550M / 555M / 560M |
| Maximum Power(Wp) | 404.5W 408.5W 412W 416W 420W 424W |
| Open Circuit Voltage(Voc) | 46.35V 46.50V 46.65V 46.8V 46.85V 47.00V |
| Short Circuit Current(Isc) | 10.95A 11.00A 11.07A 11.11A 11.21A 11.28A |
| Maximum Power Voltage(Vm) | 39.20V 39.35V 39.50V 39.65V 39.66V 39.78V |
| Maximum Power Current(Imp) | 10.32A 10.38A 10.43A 10.51A 10.59A 10.66A |

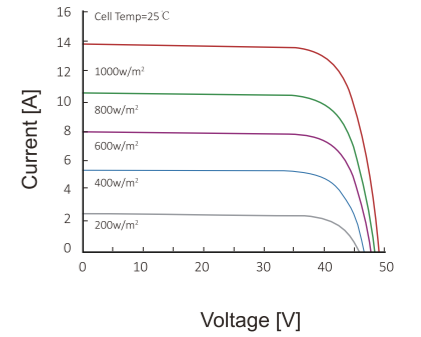
MECHANICAL CHARACTERISTICS

| | |
|---|---|
| Front Cover (Material / Thickness) | low-iron tempered glass / 3.2mm |
| Backsheet (Color) | TPT in white |
| Cell (Quantity / Material / Dimensions) | 144(6x12x2) / monocrystalline silicon,bifacial |
| Frame (Material / Color) | aluminum hollow-chamber frame on each side anodized aluminum alloy / silver |
| Junction Box (Protection Degree) | ≥IP68 |
| Cables & Plug Connectors | 4mm ² , 300mm in length,length can be customized |
| Module Dimensions (L / W / H) | 2279x1134x30/35mm |
| Module Weight | 27.73kg |
| Application Class | Class A |
| Electrical Protection Class | Class II |
| Fire Safety Class | Class C |

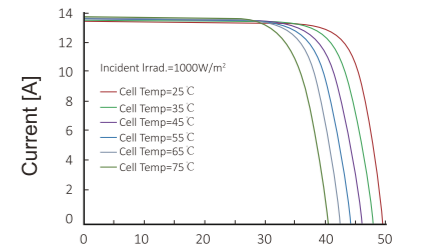
PACKING

| Container Size | Units/Pallet (PCS) | Weight/Pallet (KG) | Pallet Measurement (mm) | Units/Container (PCS) |
|----------------|--------------------|--------------------|-------------------------|-----------------------|
| 40HQ | 36 (30mm) | 1000 | 2300x1120x1260 | 720 |
| | 31 (35mm) | 900 | 2300x1120x1260 | 620 |

CURRENT-VOLTAGE CURVES:



Module characteristics at constant module temperatures of 25°C and variable levels of irradiance



Module characteristics at variable module temperatures and constant module irradiance of 1.000 W/m²

MODULE DIAGRAM:

