



Mono Crystalline Half 144 Cells 390-410 watt

HALF CELL PERC MONO MODULE

Positive power tolerance of 0~+3%

144 Half Cell Mono PERC



5 Busbar Solar Cell

5 busbar solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.



High Efficiency

Higher module conversion efficiency (up to 20.38%) benefit from half cell structure (low resistance characteristic).



PID Resistance

Excellent Anti-PID performance guarantee limited power degradation for mass production.



Low-light Performance

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.



Severe Weather Resilience

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

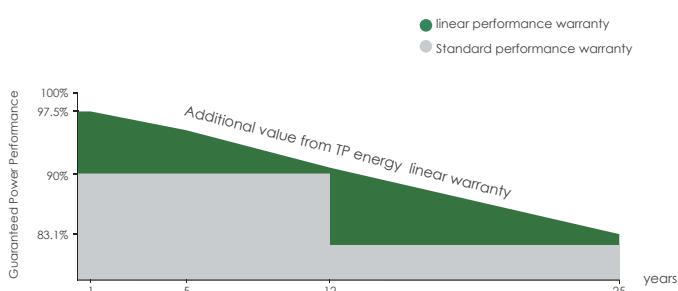


Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV Rheinland.

► Superior Warranty

TP ENERGY SOLAR PERFORMANCE WARRANTY

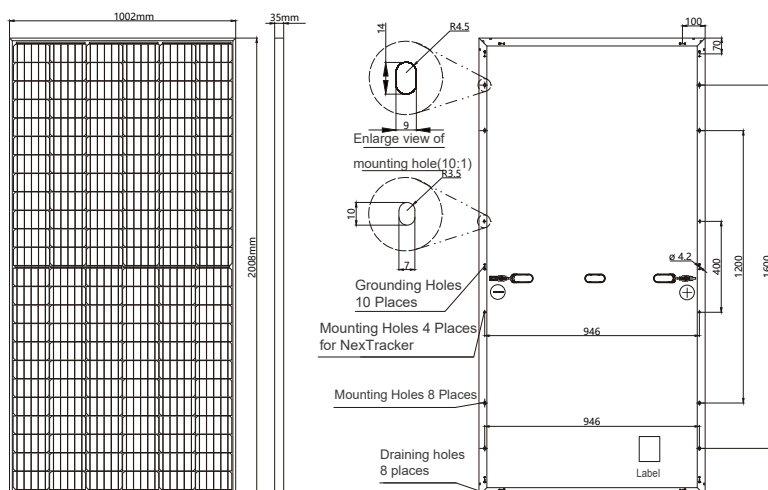


► Comprehensive Certificates

IEC61215/IEC61730/IEC61701/IEC62716
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupation Health and Safety Management System



► DIMENSIONS OF PV MODULE(mm)



► MECHANICAL DIAGRAMS

| | |
|---------------|---|
| Cell Type | Mono PERC 158.75x79.37mm |
| No. of cells | 144 (6x24) |
| Dimensions | 2008x1002x35mm |
| Weight | 22.5kg |
| Front Glass | 3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass |
| Frame | Anodized Aluminium Alloy |
| J-Box | IP67 Rated |
| Output Cables | TÜV 1x4.0mm ² Length 300+/400-(mm) length can be customized |

► Electrical Characteristics

| Module Type | TP144-390M | | TP144-395M | | TP144-400M | | TP144-405M | | TP144-410M | |
|-----------------------------|------------|--------|------------|--------|------------|--------|------------|--------|------------|--------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum Power (Pmax) | 390Wp | 294Wp | 395Wp | 298Wp | 400Wp | 302Wp | 405Wp | 306Wp | 410Wp | 310Wp |
| Maximum Power Voltage (Vmp) | 40.81V | 38.81V | 41.08V | 38.98V | 41.33V | 39.23V | 41.6V | 39.4V | 41.88V | 38.78V |
| Maximum Power Current (Imp) | 9.56A | 7.61A | 9.62A | 7.67A | 9.68A | 7.74A | 9.74A | 7.81A | 9.79A | 8.00A |
| Open-circuit Voltage (Voc) | 49.01V | 47.71V | 49.29V | 47.99V | 49.58V | 48.28V | 49.86V | 48.46V | 50.12V | 48.62V |
| Short-circuit Current (Isc) | 10.21A | 8.11A | 10.27A | 8.13A | 10.33A | 8.23A | 10.39A | 8.29A | 10.45A | 8.35A |
| Module Efficiency STC (%) | 19.38% | | 19.63% | | 19.88% | | 20.13% | | 20.38% | |

► Temperature Ratings

| | |
|---|-------------|
| NMOT (Nominal Module Operating Temperature) | 45°C (±2°C) |
| Temperature Coefficient of P _{MAX} | - 0.35%/°C |
| Temperature Coefficient of V _{oc} | - 0.29%/°C |
| Temperature Coefficient of I _{sc} | 0.048%/°C |

► Maximum Ratings

| | |
|-------------------------|--------------------|
| Operational Temperature | -40~+85°C |
| Maximum System Voltage | 1000/1500VDC (IEC) |
| Max Series Fuse Rating | 20A |

► Warranty

| |
|---------------------------------------|
| 12 Years Product Workmanship Warranty |
| 25 Years Power Warranty |

► Packaging Configuration

| | |
|----------------------------|--------|
| Modules per pallet: | 30pcs |
| Modules per 40HQ container | 660pcs |

► I-V-Curve

