



# TWMND

N-type Half-cell  
Monofacial Module (72)

## 72HS570-590W

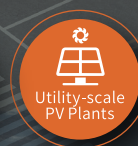
High Power Output  
Low LCOE



Maximum Power  
590W+

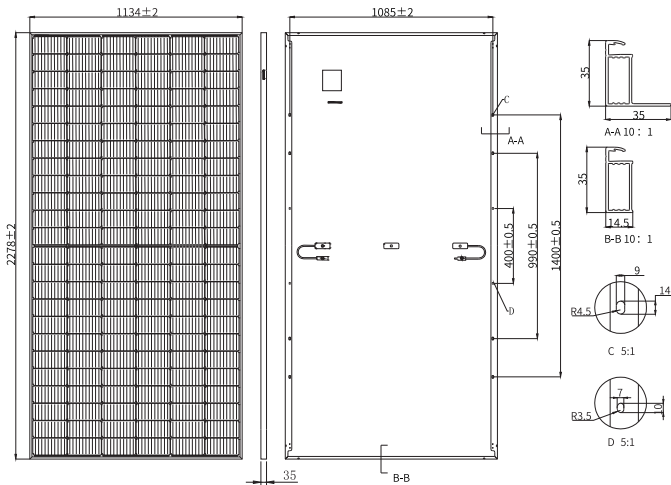


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## DRAWINGS (Unit: mm)



## ELECTRICAL CHARACTERISTICS (STC)

Module Type: TWMND-72HSXXX

|                                   |       |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|-------|
| Maximum Power: Pmax [W]           | 570   | 575   | 580   | 585   | 590   |
| Open Circuit Voltage: Voc [V]     | 52.40 | 52.60 | 52.80 | 53.00 | 53.20 |
| Short Circuit Current: Isc [A]    | 13.42 | 13.46 | 13.50 | 13.54 | 13.58 |
| Voltage at Maximum Power: Vmp [V] | 44.63 | 44.83 | 45.03 | 45.23 | 45.43 |
| Current at Maximum Power: Imp [A] | 12.78 | 12.83 | 12.90 | 12.94 | 13.00 |
| Module Efficiency: η [%]          | 22.1  | 22.3  | 22.5  | 22.6  | 22.8  |

## ELECTRICAL CHARACTERISTICS (NMOT)

|                                   |       |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|-------|
| Maximum Power: Pmax [W]           | 431.4 | 435.2 | 438.9 | 442.7 | 446.5 |
| Open Circuit Voltage: Voc [V]     | 49.80 | 50.03 | 50.22 | 50.41 | 50.60 |
| Short Circuit Current: Isc [A]    | 10.56 | 10.59 | 10.63 | 10.66 | 10.69 |
| Voltage at Maximum Power: Vmp [V] | 42.87 | 43.15 | 43.34 | 43.54 | 43.73 |
| Current at Maximum Power: Imp [A] | 10.06 | 10.08 | 10.12 | 10.16 | 10.21 |

\* STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass1.5, Measuring Tolerance: ±3%  
\* NMOT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s

## TEMPERATURE PARAMETERS

|                                |            |
|--------------------------------|------------|
| Temperature Coefficient (Pmax) | -0.30%/°C  |
| Temperature Coefficient (Voc)  | -0.25%/°C  |
| Temperature Coefficient (Isc)  | +0.046%/°C |
| NMOT                           | 45±2°C     |

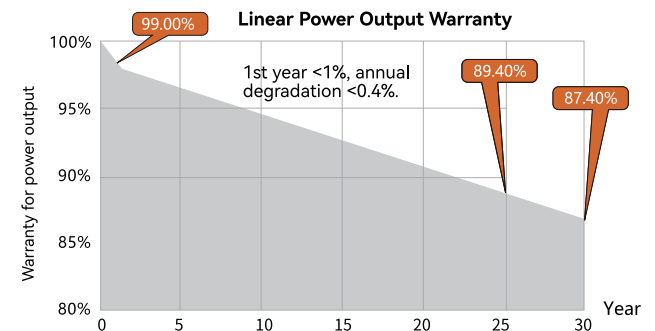
## MAXIMUM RATINGS

|                            |             |
|----------------------------|-------------|
| Operational Temperature    | -40°C~+85°C |
| Maximum System Voltage     | 1500V DC    |
| Maximum Series Fuse Rating | 25A         |
| Power Output Tolerance     | 0~+5W       |

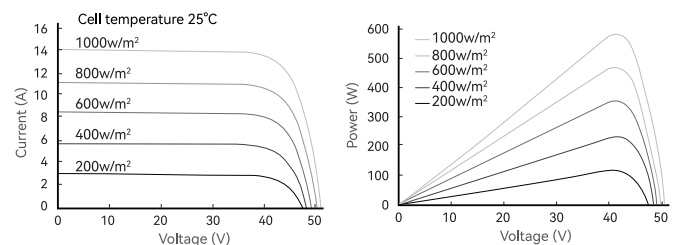
## MECHANICAL PARAMETERS

|                  |   |
|------------------|---|
| Cells            | TNC (N Type Monocrystalline Cell)                   |
| Cell Orientation | 144[6X24]   |
| Dimension        | 2278±2X1134±2X35mm                                  |
| Weight           | 27.8kg  |
| Front Glass      | 3.2mm high transmittance, AR coated tempered glass  |
| Backsheet        | White   |
| Frame            | Anodized aluminum alloy frame                       |
| Junction Box     | IP68, 3 diodes                                      |
| Output Cable     | 4.0mm <sup>2</sup>                                  |
| Cable Length     | +400mm, -200mm or ±1400mm, length can be customized |
| Wind/Snow Load   | 2400Pa/5400Pa                                       |
| Packaging        | 31pcs per pallet, 620pcs per 40'HC                  |

## WARRANTY



## I-V CURVE



## CERTIFICATIONS

### Quality Management System and Product Certification

ISO 9001:2015 / quality management system  
ISO 14001:2015 / environmental management system  
ISO 45001:2018 / occupation health safety management system  
ISO 50001:2011 / energy management system  
IEC TS 62941—2016 / PV industry quality management system  
IEC 61215/61730, IEC 62804(PID), IEC 61701(Salt),  
IEC 62716 (Ammonia), IEC 60068-2-68(Sand)

