

# Sun-Pursuit Pro Series

TOPCon  
108 - cell Module

TW-440HP-1

420-440W

0-3% Positive Tolerance



Monocrystalline



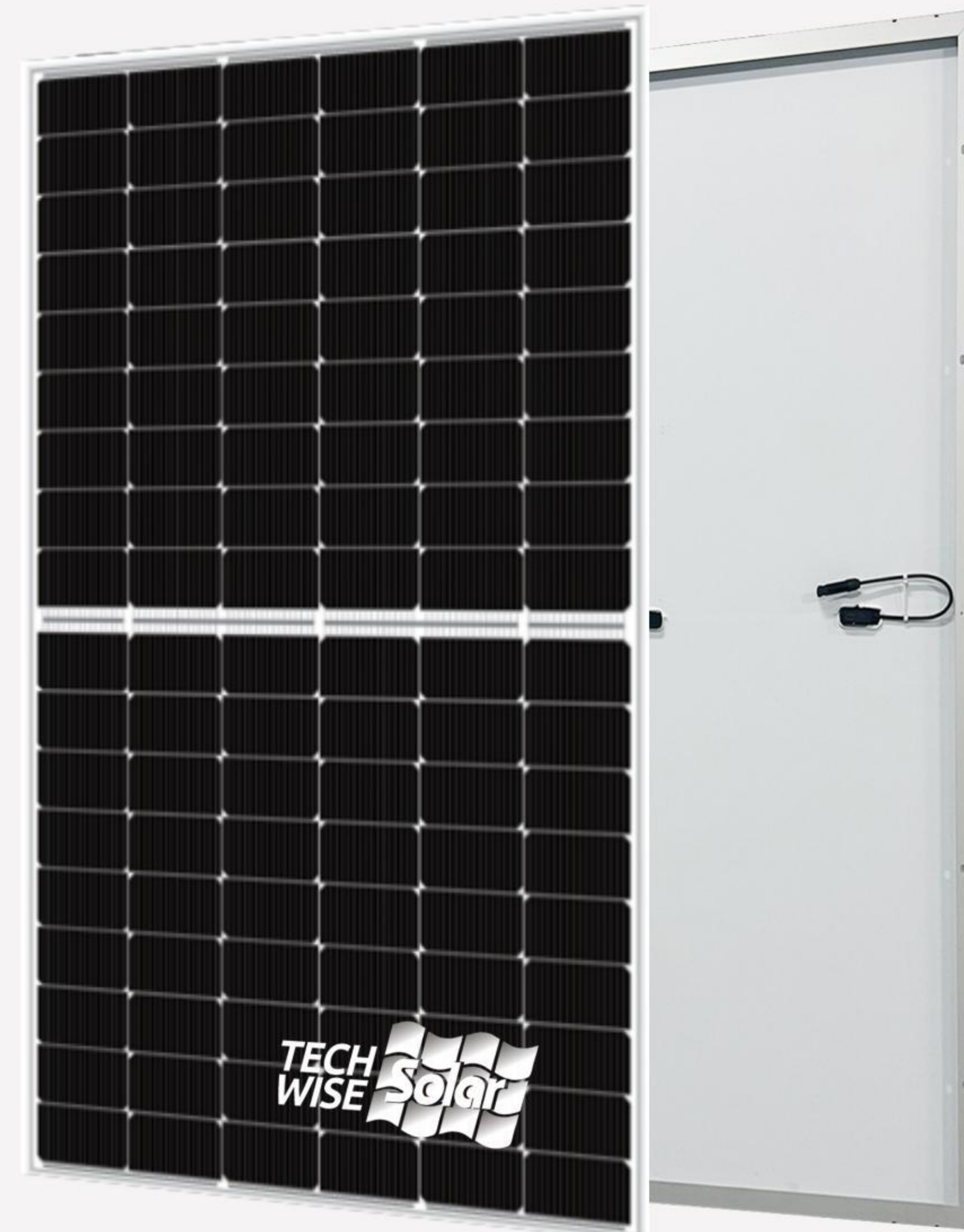
Half Cell



16BB



Grade A



## • MODULE FEATURES



### High efficiency

TOPCon technology improves efficiency, increases power generation, and contributes to lower LCOE.



### Lower heat spot risk

Innovative circuit design and "Half Cell" structure decrease the temperature of heat spots and effectively reduce power loss.



### Excellent low-light performance

Reliable performance in low-light conditions such as in the morning, at dusk or during raining days.



### Resilient to extreme weather

Carefully selected materials ensure the module still works well under the condition of 2400Pa wind load and 5400Pa snow load.



### PID resistant

High quality solar cell and advanced processing technology contribute to excellent PID resistance performance.

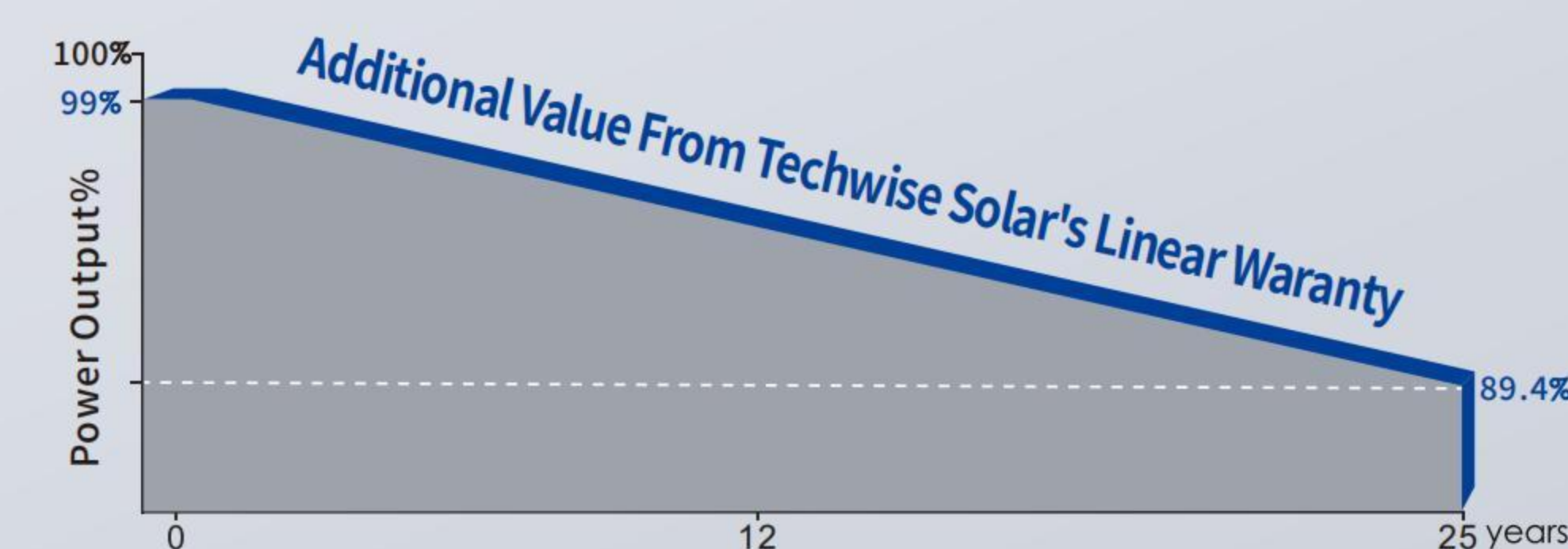
## • Quality Certification



## • Product Qualification



## • Performance Warranty



12 Years Product Warranty

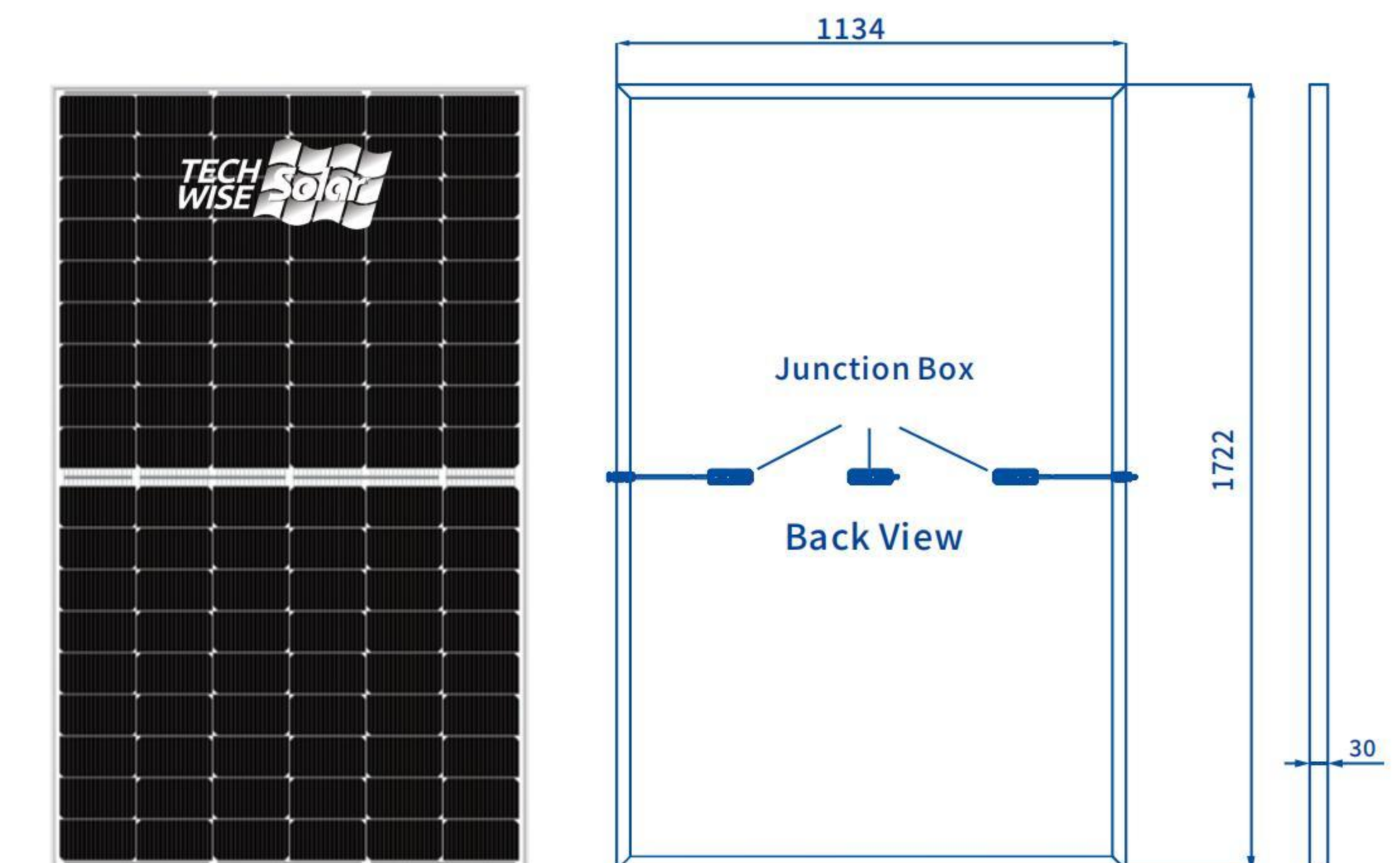
25 Years Linear Power Warranty

## TW-440HP-1

### • Product Specification •

|                      |                                   |
|----------------------|-----------------------------------|
| Cell Type            | Mono crystalline                  |
| Cell Quantity        | 108 cell                          |
| Cell Size (mm)       | 182*91                            |
| Module Size (mm)     | 1722*1134*30                      |
| Module Weight (kg)   | 20.8                              |
| Glass Thickness (mm) | 3.2                               |
| Frame Material       | Anodized aluminum alloy           |
| Junction Box         | IP68                              |
| Cable/Connector      | 4mm <sup>2</sup> , MC4 compatible |
| Cable Length         | +300mm/-300mm; or Customize       |
| Max System Volt (V)  | 1500V DC                          |
| Max Fuse Rate (A)    | 25                                |
| Power Tolerance (%)  | 0~+3%                             |

### • Engineering Drawings •



### • Electrical Characteristics •

#### STC standard performance >>>

|                       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|
| Power Level           | 420   | 425   | 430   | 435   | 440   |
| Pmax(W)               | 420   | 425   | 430   | 435   | 440   |
| Vmp(V)                | 31.50 | 31.69 | 31.87 | 32.05 | 32.23 |
| Imp(A)                | 13.34 | 13.42 | 13.50 | 13.58 | 13.66 |
| Voc(V)                | 38.07 | 38.25 | 38.43 | 38.61 | 38.79 |
| Isc(A)                | 14.09 | 14.17 | 14.25 | 14.33 | 14.41 |
| Module Efficiency (%) | 21.51 | 21.76 | 22.02 | 22.28 | 22.53 |

#### NOCT standard performance >>>

|             |       |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|
| Power Level | 420   | 425   | 430   | 435   | 440   |
| Pmax(W)     | 316   | 320   | 323   | 327   | 331   |
| Vmp(V)      | 29.36 | 29.54 | 29.60 | 29.72 | 29.87 |
| Imp(A)      | 10.77 | 10.84 | 10.92 | 11.01 | 11.09 |
| Voc(V)      | 36.16 | 36.34 | 36.52 | 36.74 | 36.85 |
| Isc(A)      | 11.38 | 11.44 | 11.51 | 11.61 | 11.71 |

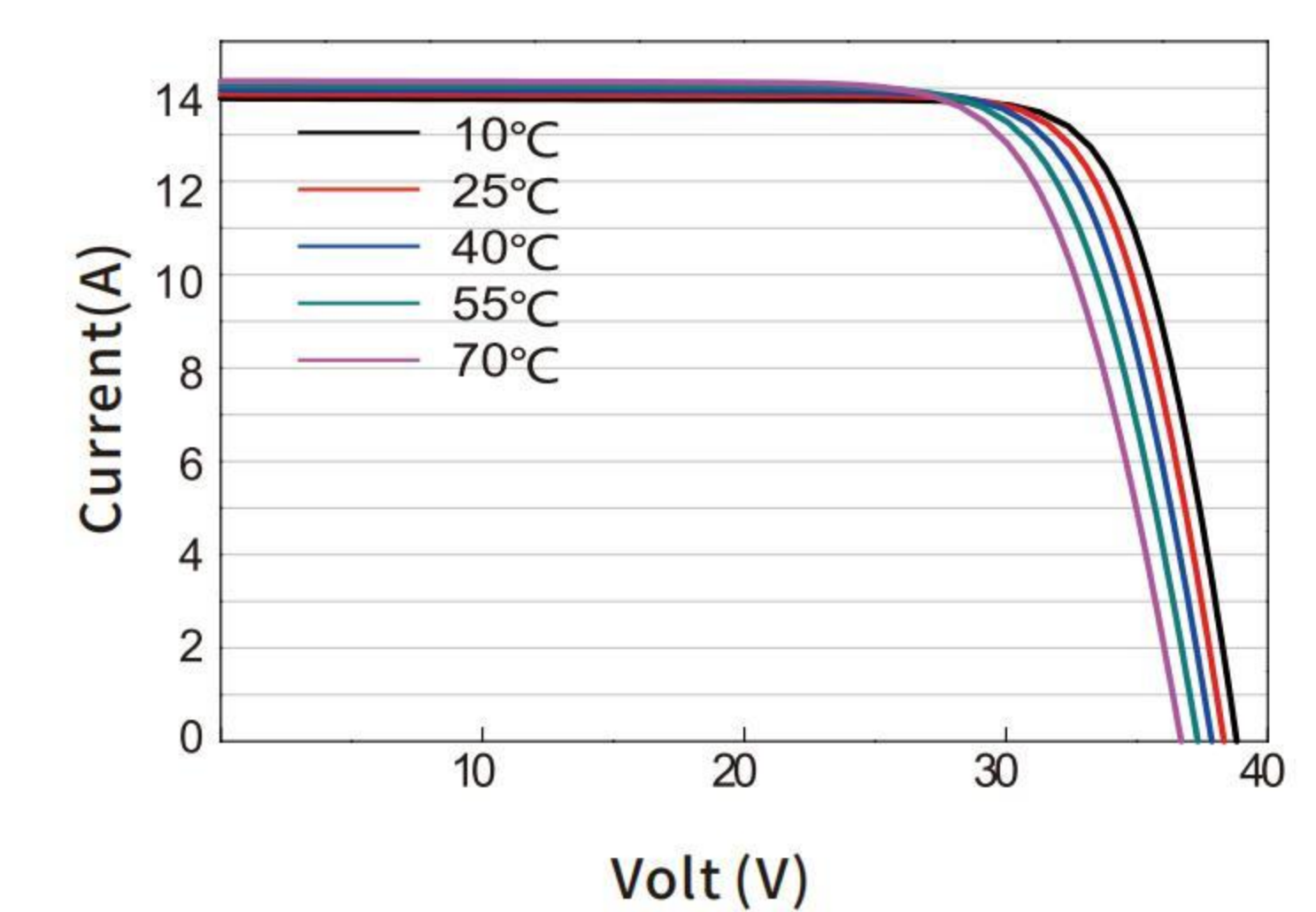
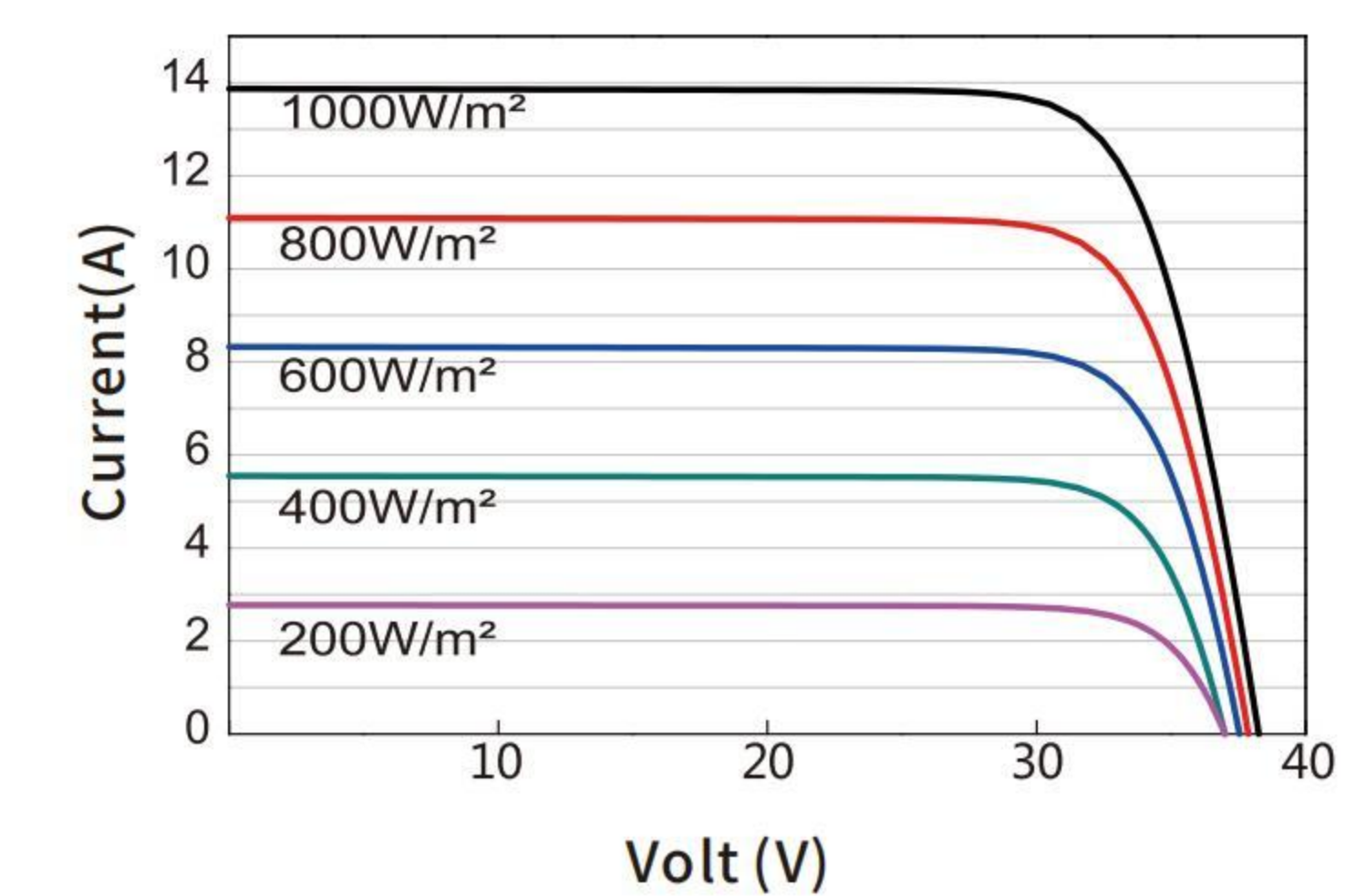
STC: Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, AM1.5

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

### • Temperature Characteristics •

|                             |                                       |
|-----------------------------|---------------------------------------|
| Operating Temp (°C)         | -40~85                                |
| Operating Humidity (°C)     | 5~85                                  |
| Hail Load Tolerance         | 25mm hailstone with velocity of 23m/s |
| Temp Coefficient            | -0.35                                 |
| Temp Coefficient Isc (%/°C) | 0.05                                  |
| Temp Coefficient Voc (%/°C) | -0.275                                |
| Operating Temp (°C)         | 44±2                                  |

### • I-V Curve •



### • Packaging Info •

|                           |                |
|---------------------------|----------------|
| Pieces per Pallet         | 36             |
| Size of Packaging (mm)    | 1750*1125*1270 |
| Weight of per Pallet (kg) | 774            |
| Pieces per Container      | 936            |
| Size of Container         | 40'HC          |



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