## Phono<sup>®</sup> Solar

# **TWINPLUS** MODULE SERIES

HIGH EFFICIENCY MONO-PERC M6-10B-R

535-555W



- Competitive high-temperature performance with ameliorated temperature
- Minimized power loss in cell connection
- Better performance under shading effect
- $\bullet$  Decreased nominal operating cell temperature to 45  $\pm$  2°C
- Higher power generation with multi-busbar and half-cut technology

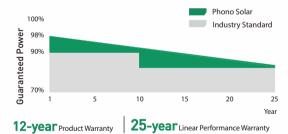
#### TRUSTWORTHY QUALITY AND RELIABILITY

- Guaranteed 0~+5W positive tolerance secures reliable power output
- 5400Pa maximum snow load, 2400Pa maximum wind load
- Optimized electrical design lowers hot spot risk and operating current

#### PID RESISTANT

• Industry-leading cell processing technology and electrical design ensure solid PID resistance





### **MANAGEMENT SYSTEM CERTIFICATES**

IEC 61215, IEC 61730

ISO 9001:2015 / Quality management system

ISO 14001:2015 / Standards for environmental management system

ISO 45001:2018 / International standards for occupational health & safety























| ELECTRICAL TYPICAL VALUES   |       |                |               |                |               |                |               |                 |               |                |               |  |
|-----------------------------|-------|----------------|---------------|----------------|---------------|----------------|---------------|-----------------|---------------|----------------|---------------|--|
| Model                       | 1000V | PS535M         | PS535M6-24/TH |                | PS540M6-24/TH |                | PS545M6-24/TH |                 | PS550M6-24/TH |                | PS555M6-24/TH |  |
|                             | 1500V | PS535M6H-24/TH |               | PS540M6H-24/TH |               | PS545M6H-24/TH |               | PPS550M6H-24/TH |               | PS555M6H-24/TH |               |  |
| Testing Condition           |       | STC            | NOCT          | STC            | NOCT          | STC            | NOCT          | STC             | NOCT          | STC            | NOCT          |  |
| Rated Power (Pmpp)          |       | 535            | 398           | 540            | 402           | 545            | 405           | 550             | 409           | 555            | 413           |  |
| Rated Current (Impp)        |       | 12.97          | 10.48         | 13.06          | 10.55         | 13.15          | 10.63         | 13.24           | 10.70         | 13.33          | 10.77         |  |
| Rated Voltage (Vmpp)        |       | 41.25          | 37.98         | 41.35          | 38.07         | 41.45          | 38.16         | 41.55           | 38.25         | 41.64          | 38.34         |  |
| Short Circuit Current (Isc) |       | 13.52          | 10.92         | 13.62          | 11.00         | 13.72          | 11.09         | 13.82           | 11.17         | 13.92          | 11.25         |  |
| Open Circuit Voltage (Voc)  |       | 49.29          | 46.53         | 49.39          | 46.62         | 49.49          | 46.72         | 49.59           | 46.81         | 49.69          | 46.91         |  |
| Module Efficiency (%)       |       | 20.71          |               | 20.90          |               | 21.10          |               | 21.29           |               | 21.48          |               |  |

 $STC(Standard\ Testing\ Conditions): Irradiance\ 1000W/m^2,\ AM\ 1.5,\ Cell\ Temperature\ 25'C$ 

NOCT (Nominal Operation Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

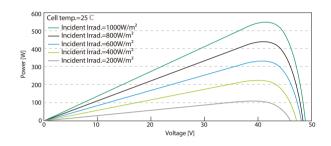
#### **MECHANICAL CHARACTERISTICS** Cell Type Monocrystalline 182mm x 91mm Length: 2278mm (89.69 inch) Dimension (L×W×H) Width: 1134mm (44.65 inch) Height: 35mm (1.38 inch) Weight 29.0kg (63.93 lbs) Front Glass 3.2mm Toughened Glass Frame Anodized Aluminium Alloy 4mm<sup>2</sup> (IEC), Cable (Including Connector) (+):450mm,(-):250mm or Customized Length IP 68 Rated **Junction Box**

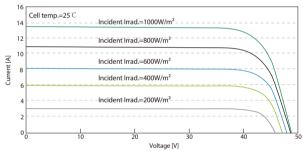
| TEMPERATURE RATINGS             |           |  |
|---------------------------------|-----------|--|
| Voltage Temperature Coefficient | -0.28%/'C |  |
| Current Temperature Coefficient | +0.05%/'C |  |
| Power Temperature Coefficient   | -0.35%/'C |  |
| Tolerance                       | 0~+5w     |  |
| NOCT                            | 45±2′C    |  |

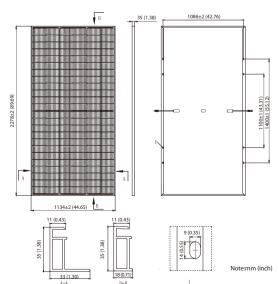
| ABSOLUTE MAXIMUM RATING            |                   |
|------------------------------------|-------------------|
| Operating Temperature              | From -40 to +85'C |
| Hail Diameter @ 80km/h             | Up to 25mm        |
| Front Side Maximum Static Loading  | 5400Pa            |
| Rear Side Maximum Static Loading   | 2400Pa            |
| Maximum Series Fuse Rating         | 25A               |
| PV Module Classification           | II                |
| Module Fire Performance (UL 61730) | Type 4            |
| Maximum System Voltage             | DC 1000V/1500V    |

| PACKING CONFIGURATION |        |        |  |  |
|-----------------------|--------|--------|--|--|
| Container             | 20' GP | 40' HQ |  |  |
| Pieces/Container      | 155    | 620    |  |  |

#### **ELECTRICAL CHARACTERISTICS**









PHONO SOLAR TECHNOLOGY CO.,LTD reserves the right to make necessary adjustments to the information described herein at any time without further notice. The specifications and certificates contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Please be sure to use the most recent version of data.