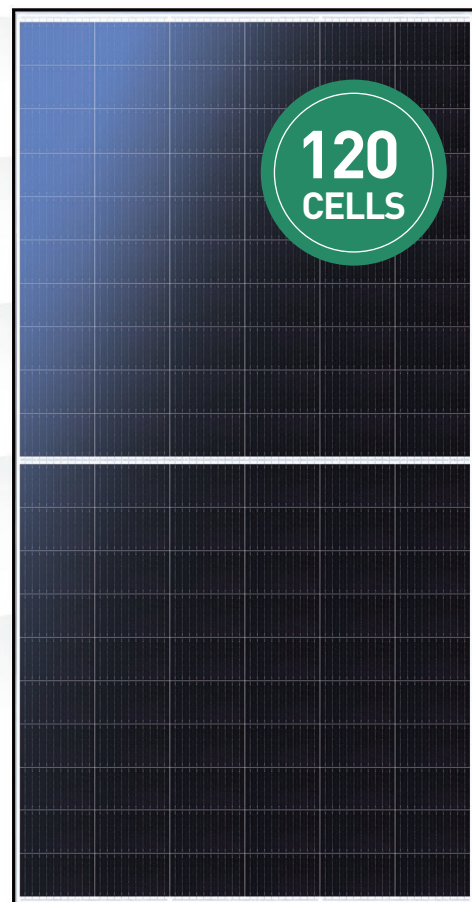


# TWINPLUS MODULE SERIES

HIGH EFFICIENCY MONO-PERC M6-10B-R

# 440-460W



## OUTSTANDING PRODUCT PERFORMANCE

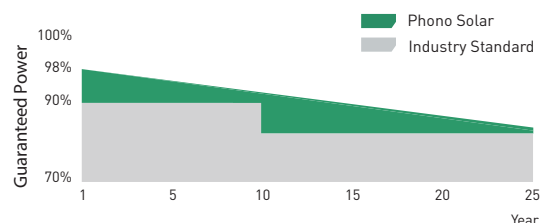
- Competitive high-temperature performance with ameliorated temperature coefficient
- Minimized power loss in cell connection
- Better performance under shading effect
- Decreased nominal operating cell temperature to  $45 \pm 2^{\circ}\text{C}$
- Higher power generation with multi-busbar and half-cut 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



15-year Product Warranty

25-year Linear Performance Warranty

## 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



Bloomberg Tier<sup>1</sup>  
NEW ENERGY FINANCE



## ELECTRICAL TYPICAL VALUES

| Model                       | 1000V | PS440M6-20/UH  |       | PS445M6-20/UH  |       | PS450M6-20/UH  |       | PS455M6-20/UH  |       | PS460M6-20/UH  |  |
|-----------------------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|--|
|                             | 1500V | PS440M6H-20/UH |       | PS445M6H-20/UH |       | PS450M6H-20/UH |       | PS455M6H-20/UH |       | PS460M6H-20/UH |  |
| Testing Condition           | STC   | NOCT           | STC   | NOCT           | STC   | NOCT           | STC   | NOCT           | STC   | NOCT           |  |
| Rated Power (Pmpp)          | 440   | 327            | 445   | 331            | 450   | 335            | 455   | 339            | 460   | 342            |  |
| 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)        | 33.93 | 31.24          | 34.08 | 31.37          | 34.23 | 31.51          | 34.37 | 31.64          | 34.51 | 31.78          |  |
| 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)  | 40.55 | 38.28          | 40.71 | 38.43          | 40.87 | 38.58          | 41.02 | 38.72          | 41.19 | 38.88          |  |
| Module Efficiency (%)       | 20.33 |                | 20.56 |                | 20.79 |                | 21.02 |                | 21.25 |                |  |

STC(Standard Testing Conditions):Irradiance 1000W/m<sup>2</sup>, AM 1.5, Cell Temperature 25°C

NOCT (Nominal Operation Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

## MECHANICAL CHARACTERISTICS

|                                |   |
|--------------------------------|---|
| Cell Type                      | Monocrystalline 182mm x 91mm  |
| Dimension (L×W×H)              | Length: 1909mm [75.16 inch]   |
|                                | Width: 1134mm [44.65 inch]  |
|                                | Height: 30mm [1.18 inch]  |
| Weight                         | 24.0kg [52.91 lbs]  |
| Front Glass                    | 3.2mm Toughened Glass   |
| Frame                          | Anodized Aluminium Alloy  |
| Cable<br>(Including Connector) | 4mm <sup>2</sup> (IEC),<br>(+):450mm,(-):250mm or Customized Length |
| Junction Box                   | IP 68 Rated   |

## 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    |

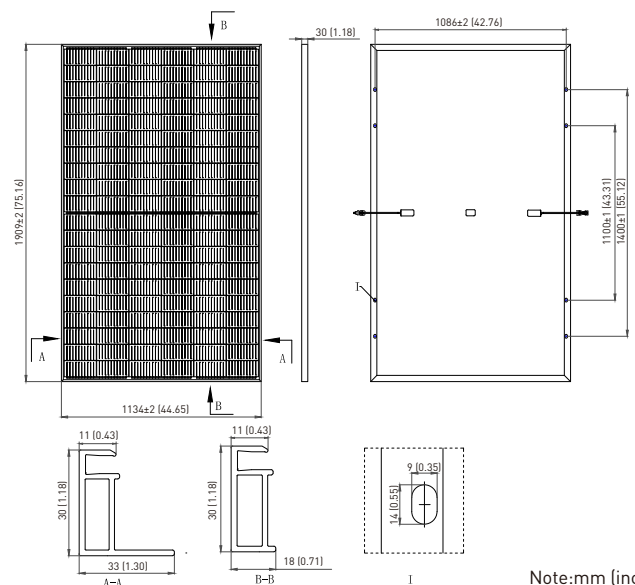
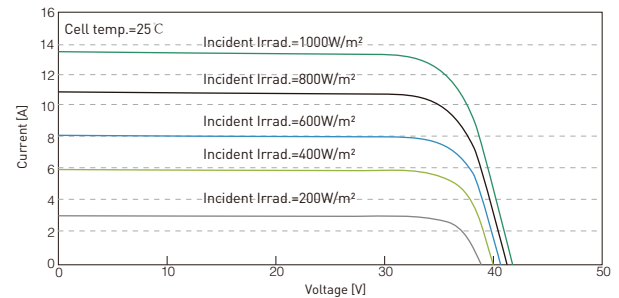
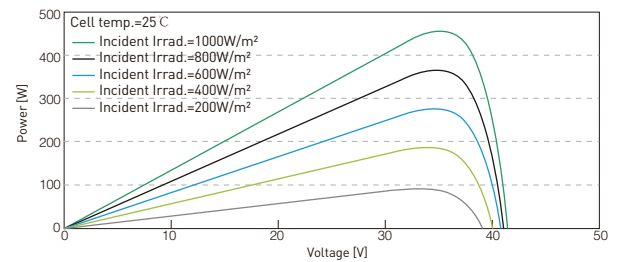
## ABSOLUTE MAXIMUM RATING

|                                   |                   |
|-----------------------------------|-------------------|
| 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                |
| Fire Rating (IEC 61730)           | C                 |
| Maximum System Voltage            | DC 1000V/1500V    |

## PACKING CONFIGURATION

|                  |        |        |
|------------------|--------|--------|
| Container        | 20' GP | 40' HQ |
| Pieces/Container | 180    | 864    |

## ELECTRICAL CHARACTERISTICS



Note:mm (inch)