



# 435-455w

## Twinplus Module Series

HIGH EFFICIENCY MONO-PERC M6-10B-R

**Bloomberg**  
NEW ENERGY FINANCE

**Tier1**



### Aesthetic Design in All Black

### Outstanding Product Performance

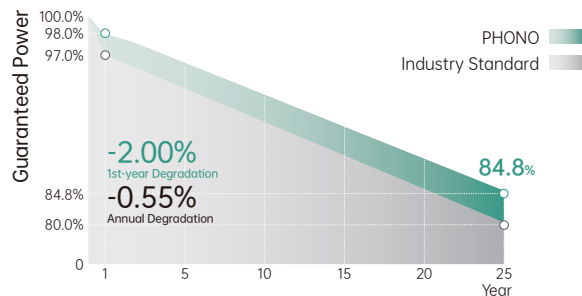
- Competitive high-temperature performance with ameliorated temperature coefficient
- Minimized power loss in cell connection
- Better performance under shading effect
- Decreased nominal operating cell temperature to  $45 \pm 2^{\circ}\text{C}$
- Higher power generation with multi-busbar and half-cut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



**12-year\***  
Product Warranty

**25-year**  
Linear Performance Warranty

\*Product warranty can be extended to 25 years for a fee by contacting your local sales representative

### 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	PS435M6-20/UH		PS440M6-20/UH		PS445M6-20/UH		PS450M6-20/UH		PS455M6-20/UH	
	1500V	PS435M6H-20/UH		PS440M6H-20/UH		PS445M6H-20/UH		PS450M6H-20/UH		PS455M6H-20/UH	
Testing Condition		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated Power (Pmpp)		435	328	440	332	445	335	450	339	455	343
Rated Current (Impp)		12.88	10.39	12.97	10.46	13.06	10.54	13.15	10.61	13.24	10.68
Rated Voltage (Vmpp)		33.78	31.55	33.93	31.69	34.08	31.83	34.23	31.96	34.37	32.10
Short Circuit Current (Isc)		13.42	10.83	13.52	10.91	13.62	10.99	13.72	11.07	13.82	11.15
Open Circuit Voltage (Voc)		40.39	38.29	40.55	38.44	40.71	38.59	40.87	38.74	41.02	38.89
Module Efficiency (%)		20.09		20.33		20.56		20.79		21.02	

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
Dimension (L × W × H)	Length: 1909mm (75.16 inch)
	Width: 1134mm (44.65 inch)
	Height: 30mm (1.18 inch)
Weight	23.5kg (51.80 lbs)
Glass	3.2mm toughened glass
Frame	Anodized Aluminium Alloy
Cable (Including Connector)	4mm <sup>2</sup> (IEC), (+): 450mm, (-): 250mm or Customized Length
Junction Box	IP 68 Rated

## Temperature Ratings

Voltage Temperature Coefficient	-0.26%/°C
Current Temperature Coefficient	+0.042%/°C
Power Temperature Coefficient	-0.33%/°C
Power Tolerance	0~+3%
NOCT	45±2°C

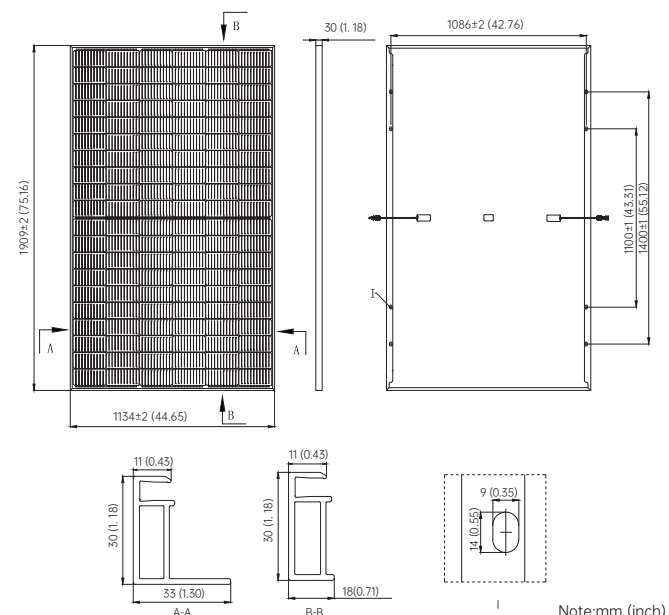
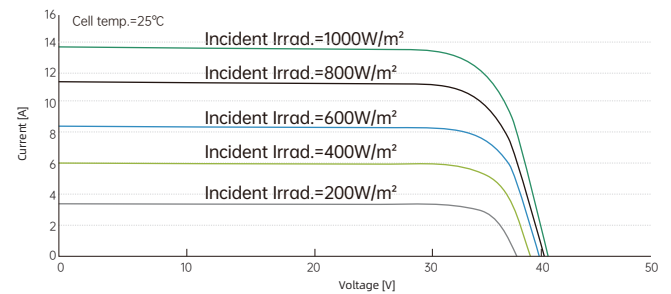
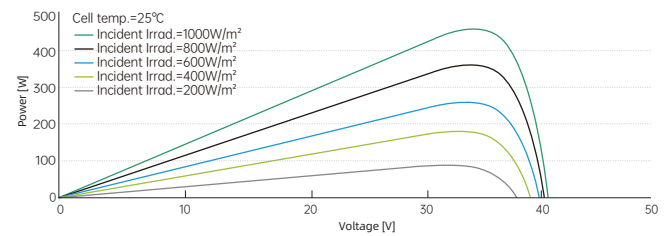
## Absolute Maximum Rating

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 (IEC61730)	C
Maximum System Voltage	DC 1000V/1500V

## Packing Configuration

Container	20' GP	40' HQ
Pieces/Container	180	864
Pcs/Pallet	36	36
Pallets/Container	5	24

## 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.