

TWINPLUS MODULE SERIES

HIGH EFFICIENCY MONO-PERC M6-10B-R

440-460W



OUTSTANDING PRODUCT PERFORMANCE

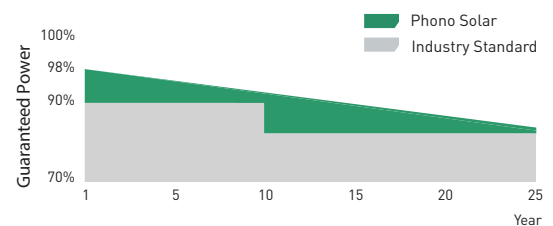
- Competitive high-temperature performance with ameliorated temperature coefficient
- Minimized power loss in cell connection
- Better performance under shading effect
- Decreased nominal operating cell temperature to $45 \pm 2^{\circ}\text{C}$
- Higher power generation with multi-busbar and half-cut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



12-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 Tier1
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/m², 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
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 (Including Connector)	4mm ² (IEC), (+):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

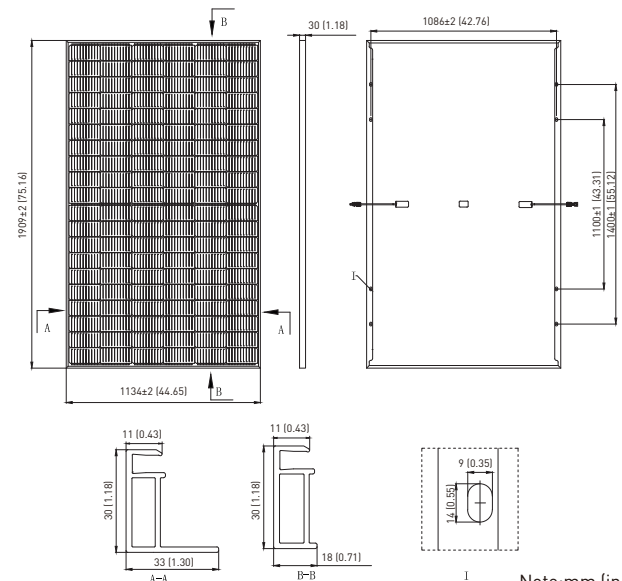
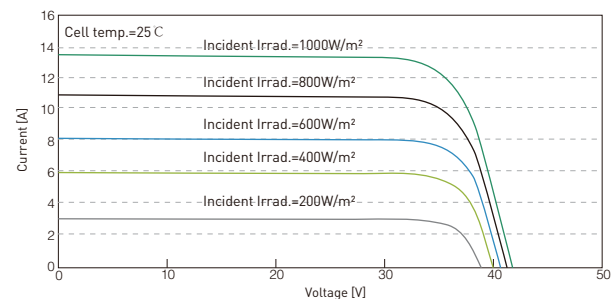
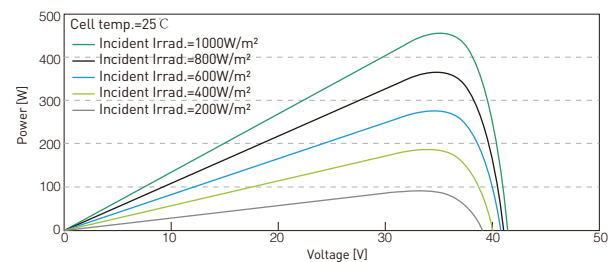
ABSOLUTE MAXIMUM RATING

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)

Phono[®] Solar

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.