



# 540-560W Twinplus Module Series



## **Extraordinary Product Performance**

- Up to 25% additional power yield benefited from bifacial technology
- Lower power loss in cell connection and under shading conditions
- Competitive high-temperature performance with ameliorated temperature coefficient
- Higher power generation with multi-busbar and half-cut technology

## **High Quality Reliability**

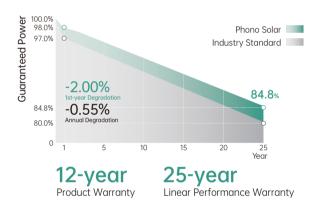
- Optimized electrical design lowers hot spot risk and operating current
- Corrosion resistance guarantees enhanced reliability in harsh environments
- Minimized Risk of microcrack and snail trail

## **Easy Installation**

- Framed design improves mounting and racking method compatibility
- Safer and easier handling during transportation and installation

## **PID Resistant**

• Industry-leading cell processing techonology and electrical design ensures 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











www.phonosolar.com / info@phonosolar.com

Electrical Typical Values												
Model	1000V	PS540M8-24/TH		PS545M8-24/TH		PS550M	PS550M8-24/TH		PS555M8-24/TH		PS560M8-24/TH	
	1500V	PS540M8H-24/TH		PS545M8H-24/TH		PS550M8	PS550M8H-24/TH		PS555M8H-24/TH		PS560M8H-24/TH	
Testing Condition		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Rated Power (Pmpp)		540	402	545	405	550	409	555	413	560	417	
Rated Current (Impp)		13.06	10.55	13.15	10.63	13.24	10.70	13.33	10.77	13.42	10.84	
Rated Voltage (Vmpp)		41.35	38.07	41.45	38.16	41.55	38.25	41.64	38.34	41.73	38.42	
Short Circuit Current (Isc)		13.62	11.00	13.72	11.09	13.82	11.17	13.92	11.25	14.02	11.33	
Open Circuit Voltage (Voc)		49.39	46.62	49.49	46.72	49.59	46.81	49.69	46.91	49.79	47.00	
Module Efficiency (%)		20.90		21.10		21.	21.29		21.48		21.68	

STC(Standard Testing Conditions): Irradiance 1000W/m², AM 1.5, Cell Temerature 25°C

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

#### **Electrical Characteristics With Different Power Bin** 5% Maximum Power (W) 559 564 569 574 580 Module Efficiency (%) 22.04 22.24 22.44 21.64 21.84 15% Maximum Power (W) 597 619 602 608 613 Module Efficiency (%) 23.10 23.31 23.53 23.74 23.95 25% Maximum Power (W) 635 640 646 652 658 Module Efficiency (%) 25.02 25.24 24.56 24.79 25.47

40' HQ

620

Mechanical Characteristics				
Cell Туре	Monocrystalline 182mm x 91mm			
Dimension (L × W × H)	Length: 2278mm (89.69 inch) Width: 1134mm (44.65 inch) Height: 35mm (1.38 inch)			
Weight	28.0kg (61.72 lbs)			
Glass	3.2mm toughened glass			
Frame	Anodized Aluminium Alloy			
Cable (Including Connector)	4mm² (IEC), (+): 450mm,(-): 250mm or Customized Length			
Junction Box	IP 68 Rated			
Temperature Ratings				
Voltage Temperature Coefficient	-0.28%/°C			
Current Temperature Coefficient	0.000/190			

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
Bifaciality	70±5%

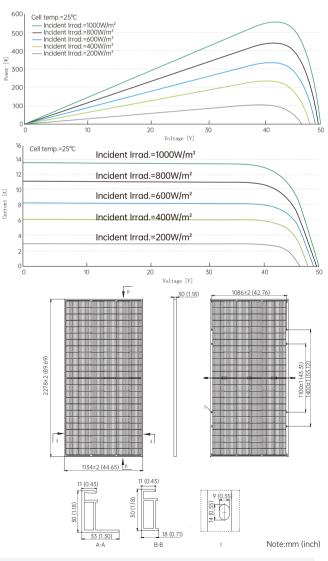
#### Absolute Maximum Rating

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	30A
PV Module Classification	II
Fire Rating (IEC61730)	С
Maximum System Voltage	DC 1000V/1500V

### Packing Configuration

Container	20' HQ
Pieces/Container	155

#### **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.