





#### **ABOUT PHONO SOLAR**

Phono Solar Technology Co., Ltd. is one of the world's leading renewable energy product manufacturers and trusted provider. The Phono Solar brand has become synonymous with high performing, top quality photovoltaic panels that are ideal for use in large scale power plants, commercial and residential installations.

#### **Enphase Microinverter**

The integrated Enphase Microinverter, instantly converts DC to ready to use AC power. The intelligent microinverter sends vital health and performance information to the Enphase Envoy communications gateway.



**ONYX** Series Attractive black frame with black backsheet.

### HIGH PERFORMANCE AC SOLAR MODULE

# AC Series 250W

#### AC ADVANTAGE

- High efficiency solar module integrated with an Enphase microinverter, the world's most efficient AC system solution
- Optimized for higher output in low light conditions
- Individually optimized module
- Eliminates module mismatch loss
- Shading affects only the shaded panel, not the entire system

#### SAFETY

- No high voltage DC wiring
- Fire Prevention-No risk of DC arc faults
- ETL Certified AC Model-No separate grounding electrode conductor (GEC) required

#### AC MODULE COMPLIANCE





## · Performance monitoring and system Maximized system up-time with remote • Quick and simple design, installation Provides solar system performance information, analytics and automated

#### RELIABILITY

alerts

INTELLIGENT

management

and management

diagnosis and resolution

• The microinverter bracket is

connection to the module

engineered for a safer more secure

- 25-year panel and microinverter performance warranty\*
- 10-year workmanship warranty\*
- Free module recycling through PV Cycle Association membership\*\*
  - \*In compliance with warranty terms and conditions.
  - \*\*In PV Cycle member countries only, see www.pvcycle.com for details.

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#### Model: PS250P-AC

Attractive black frame with black backsheet ONYX Series.

#### MECHANICAL CHARACTERISTICS

Solar Cells	Polycrystalline 156mm x 156mm square, 6 x 10 pieces in series	
Length: 1640mm (64.57 inch)		
Dimension	Width: 992mm (39.06 inch)	
	Height: 75mm (2.95 inch)	
Weight	21.6kg (47.6lbs)	
Front Glass	3.2mm toughened glass	
Frame	Anodized aluminium alloy	
Cable	0.90m wire (ø 4mm <sup>2</sup> )	
Diodes	6 pieces Schottky by-pass diodes	
Junction Box	IP 65 rated	

#### AC ELECTRICAL TYPICAL VALUES

Output Data (AC)	@208 Vac	@240 Vac
Maximum output power	215W	215W
Nominal output current	1.0A (arms at nominal duration)	0.9A (arms at nominal duration)
Nominal voltage/range	208V/183-229V	240V/211-264V
Extended voltage/range	208V/179-232V	240V/206-269V
Nominal frequency/range	60.0/59.3-60.5 Hz	60.0/59.3-60.5 Hz
Extended frequency range	60.0/59.2-60.6 Hz	60.0/59.2-60.6 Hz
Power Factor	>0.95	>0.95
Maximum units per 20A branch circuit	25 (three phase)	17 (single phase)
Maximum output fault current	1.05 Arms, over 3 cycles; 25.2 Apeak, 1.74ms duration	
Ambient temperature range	-40°C to + 65°C	

#### TEMPERATURE CHARACTERISTICS (DC MODULE)

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Voltage Temperature Coefficient	-0.31%/K
Current Temperature Coefficient	+0.07%/K
Power Temperature Coefficient	-0.40%/K

#### WEAK LIGHT PERFORMANCE (DC MODULE)

Intensity [W/m <sup>2</sup> ]	Impp	V <sub>mpp</sub>
1000	1	1
800	0.8	0.996
600	0.6	0.99
400	0.4	0.983
200	0.2	0.952
100	0.1	0.921

Note: This publication summarizes product warranty and specifications, which are subjected to change without notice. Additional information can be found on www.phonosolar.com

1. Defined as standard deviation of thousands measurements. Absolute power values depend on the measuring system. They can differ by +/-5% from one measuring system to another.

 Measurement conditions under irradiance level of Standard Test Conditions (STC): 1000W/m<sup>2</sup>, Air mass 1.5 Spectrum, cell temperature of 25°C.

#### ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
Maximum Series Fuse Rating	15A
IEC Application Class (IEC 61215)	A
Fire Rating (UL 1703)	C

#### DIMENSIONS





