

PHONO SOLAR

Phono Solar Technology Co., Ltd. is one of the world's leading renewable energy product manufacturers and a well-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

The Enphase Microinverter is a compact unit that connects directly to Phono Solar PV modules, converting DC to AC power at source. The microinverter also sends vital health and performance information to the Enphase Envoy communications gateway.



Diamond Series

Onyx Series

**HIGH PERFORMANCE
AC SOLAR MODULE
250W-260W**

PRODUCTIVE

- High efficiency solar module integrated with an Enphase microinverter, the world's most efficient microinverter
- High output due to excellent performance in weak-light conditions
- Each module is individually optimized
- Eliminates module mismatch loss
- Shading affects only the shaded panel, not the entire system
- M215: Peak efficiency 96.3%, CEC efficiency 96.5%, static MPPT efficiency 99.4%

INTELLIGENT

- Performance monitoring on every module
- Issues with the array are automatically identified, diagnose and resolved by remote trouble shooting
- Quick and simple design, installation and management
- Provides solar system performance information, analytics and automated alerts

SAFE

- No high voltage DC wiring
- Fire Prevention – no risk of DC arc faults

DESIGN

- Silver frame with white back sheet
- Black frame with black back sheet or optional white back sheet



PV MODULE COMPLIANCE
MICRO INVERTER COMPLIANCE
VDE-0126-1-1, DK5940, C10/11, EN62109-2, G83/1-1, UL1741



MECHANICAL CHARACTERISTICS

Solar Cells	Polycrystalline 156mm x 156mm square, 6 × 10 pieces in series
Dimension	Length: 1640mm (64.6 inch)
	Width: 992mm (39.1 inch)
	Frame Height: 40mm, Total Height: 70mm
Weight	21.6kg(47.6lbs)
Front Glass	3.2mm toughened glass
Frame	Anodized aluminum alloy
Cable	4mm ² (IEC) / 12AWG(UL), 900mm
Junction Box	IP 67 rated
Microinverter	Enphase M215

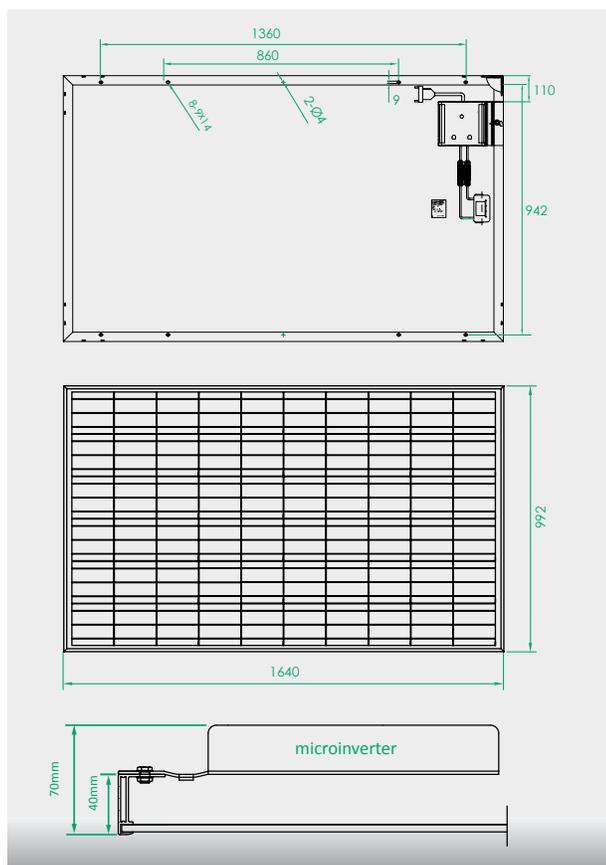
ABSOLUTE MAXIMUM RATING

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 (IEC61730)	A
Fire Rating (UL 1703)	Type 1
Maximum System Voltage	DC 1000V(IEC)
	DC 600V(UL)/1000V(ETL)

ELECTRICAL TYPICAL VALUES^{1,2}

Model	Rated Power (P _{mpp})	Rated Current (I _{mpp})	Rated Voltage (V _{mpp})	Short Circuit Current (I _{sc})	Open Circuit Voltage (V _{oc})	Module Efficiency (%)
PS250P-20/U	250W	8.30A	30.2V	8.70A	37.8V	15.37
PS255P-20/U	255W	8.42A	30.4V	8.80A	37.9V	15.67
PS260P-20/U	260W	8.53A	30.6V	8.90A	38.0V	15.98

DIMENSIONS



AC Electrical Specification

Output (AC)	@208 VAC	@240 VAC
Maximum AC output power (-40 to 65°C)	225 W	225 W
Nominal output current	1.03 A	0.93 A
Nominal voltage	208 V / 183-229 V	240 V / 211-264 V
Nominal frequency	60.0Hz / 57-61 Hz	60.0Hz / 57-61 Hz
Power Factor	>0.95	>0.95
Maximum units per 20A branch circuit	17 (Ph + N); 25 (3Ph + N)	17 (Ph + N); 25 (3Ph + N)
Maximum output fault current	850 mA rms for 6 cycles	850 mA rms for 6 cycles
EN 50530 (EU) efficiency	96.5%	96.5%
Static MPPT efficiency (weighted, reference EN50530)	99.4%	99.4%
Communication	Power line	Power line
Night time power consumption	65mW	65mW
Operating temperature range (internal)	-40°C to + 85°C	-40°C to + 85°C
Cooling	Natural convection - No fans	Natural convection - No fans

WEAK LIGHT PERFORMANCE

Intensity [W/m ²]	I _{mpp}	V _{mpp}
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

PACKING CONFIGURATION

Container	40' HQ
Frame height(mm)	40
Pieces per pallet	20
Pallets per container	28
Pieces per container	560

WARRANTY

MODULE-25 YEARS

INVERTER-25 YEARS (UK 20 YEARS)

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

2. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m², Air mass 1.5 Spectrum, cell temperature of 25°C.

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