

POLY-CRYSTALLINE SOLAR MODULE - 60 CELLS

- **OS-15660 PA225**
- **OS-15660 PA230**
- **OS-15660 PA235**
- **OS-15660 PA240**

FEATURES

- High reliability with guaranteed 0 to +5% power output tolerance
- Passing mechanical load test of 5400 Pa to withstand heavier snow load and 2400 Pa to withstand wind pressure. Strong frame, easy to install
- High transparency tempered glass: 3.2 mm, with durable glass surface
- Excellent performance under low light environment
- Power series ranging from 210 to 250 watts meet different customers demands
- International quality and safety certifications

WARRANTIES

- 10 years for product materials and workmanship
- 12 years at 90% of the minimal rated power output
- 25 years at 80% of the minimal rated power output



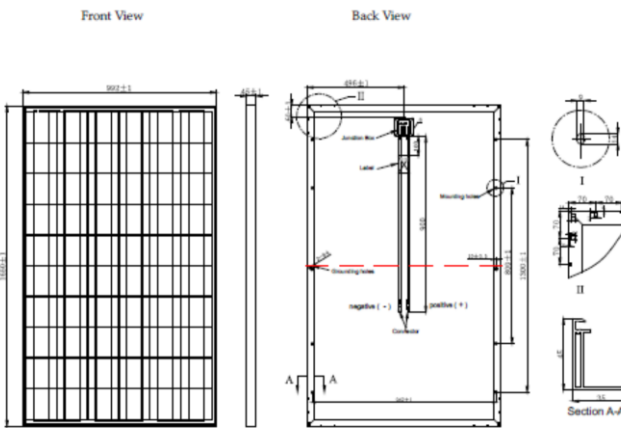
POLY-CRYSTALLINE SOLAR MODULE

60 CELLS - 156 mm



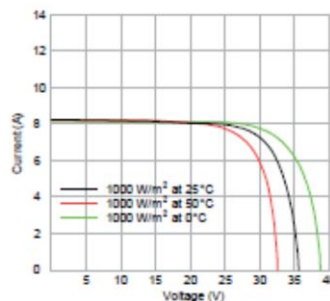
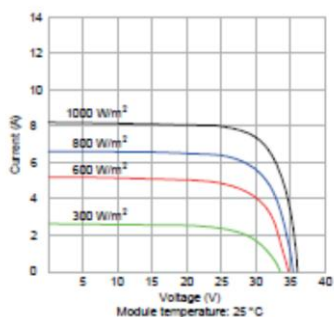
ELECTRICAL CHARACTERISTICS*	PA225	PA230	PA235	PA240
Nominal Output (Pmax) [W]	225	230	235	240
Flash Test Power Classification [%]	0 / +5	0 / +5	0 / +5	0 / +5
Voltage at Pmax (Vmp) [V]	29.5	29.5	30	30
Current at Pmax (Imp) [A]	7.63	7.8	7.83	8.0
Open Circuit Voltage (Voc) [V]	36.6	36.6	37.2	37.2
Short Circuit Current (Isc) [A]	8.24	8.42	8.46	8.65
Maximum System Voltage [V]	IEC: 1000 / UL: 600			
Maximum Series Fuse Rating [A]	12			
Cell Efficiency [%]	15.41	15.75	16.09	16.44
Module Efficiency [%]	13.75	14.05	14.36	14.66

STC* (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25°C, Air Mass 1.5

TEMPERATURE CHARACTERISTICS		DIMENSIONS	
NOCT**	45±2 °C		
Temperature Coefficient of Pmax	-0.47 %/°C		
Temperature Coefficient of Voc	-0.346 %/°C		
Temperature Coefficient of Isc	0.036 %/°C		
Operating Temperature	-40 °C to +85 °C		
MECHANICAL CHARACTERISTICS			
Solar Cells	60(6x10) polycrystalline cells 156 mm		
Font Cover	3.2 mm thick, low iron tempered glass		
Back Cover	TPT (Tedlar-PET-Tedlar)		
Encapsulant	EVA (Ethylene vinyl acetate)		
Frame	Anodized aluminium alloy, double wall		
Diodes	6 Bypass diodes serviceable		
Junction Box	IP65 rated		
Connector	MC4 or compatible connector		
Cables	Length: 900 mm / Section: 4.0 mm²		
Dimension [mm]	1650 x 992 x 45		
Weight [kg]	19.5		
Max. Load	Certified to 2400 Pa		

NOCT**: Nominal Operation Cell Temperature Sun 800W/m², Air 20°C, Wind speed 1m/s

CURRENT / VOLTAGE CHARACTERISTICS



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SolarRiver 3300TL / 4400TL / 5200TL
(Single phase)

Features:

Leading-edge Technology

- Transformerless H6 Topology
- Wide MPP voltage range
- Compact design
- Small size and lightweight

Flexibility

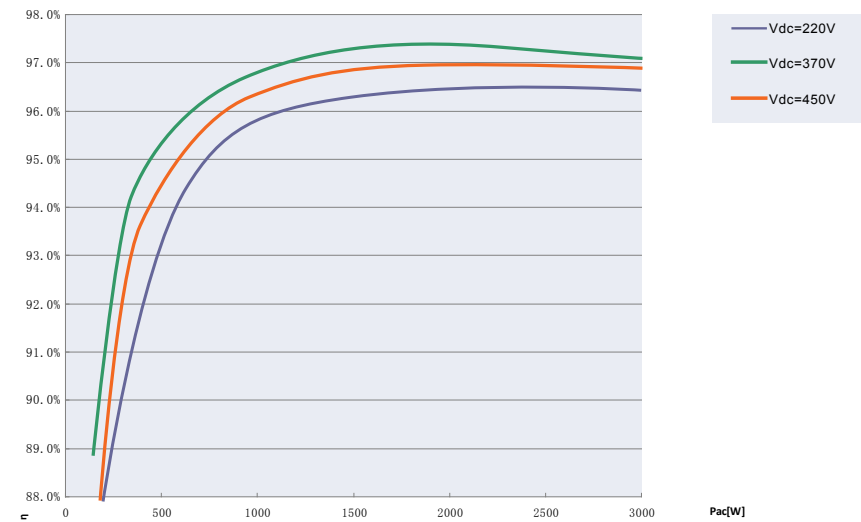
- Use for indoor or outdoor (IP65)
- “Plug and play” connection for easy installation and maintenance
- Multi-lingual display
- Simple national setting
- Automatic country configuration

Built to last

- Stainless steel housing
- Automatic protection including over voltage, islanding, short circuit, overload and under voltage, under load, etc.
- 5 years standard warranty, up to 20 years warranty extension.



SolarRiver 3300TL Efficiency



Datasheet

Inverter Model	SolarRiver 3300TL	SolarRiver 4400TL	SolarRiver 5200TL
Input (DC)			
Max. DC power [W]	3480	4580	5200
Max. DC voltage [V]	550	550	550
Max. input current [A]	17.5	21	26
Number of MPP trackers / Strings per MPP tracker	1 / 2	1 / 2	1 / 2
MPPT voltage range (at rated power) [V]	200~500	200~500	200~500
Shutdown voltage /Start voltage [V]	70 / 100	70 / 100	70 / 100
Output (AC)			
AC nominal power [W]	3000	4000	4600
Max. AC power [W]	3300	4400	5000
Max. AC current [A]	16	22	24
Nominal AC voltage / range [V]	230 / 180~270	230 / 180~270	230 / 180~270
AC grid frequency / range [Hz]	50 / 47~52	50 / 47~52	50 / 47~52
Power factor (cosφ)	1	1	1
Total harmonic distortion (THDi) (at nominal power)	<3%	<3%	<3%
Efficiency			
Max. efficiency	97.4%	97.6%	97.6%
Euro efficiency	96.5%	97.1%	96.8%
MPPT efficiency	99.9%	99.9%	99.9%
General data			
Dimensions (W / H / D) [mm]	329 / 433 / 180	329 / 433 / 180	329 / 433 / 180
Weight [kg]	18.9	19.2	19.4
Operating temperature range [°C]	-20~+60 (derating at 45 °C)	-20~+60 (derating at 45 °C)	-20~+60 (derating at 45 °C)
Ingress protection	IP65	IP65	IP65
Topology	transformerless	transformerless	transformerless
Internal consumption (night) [W]	0	0	0
Cooling concept	Convection	Fan	Fan
Noise (typical) [dB]	<30	<40	<40
LCD display	Backlight, 16*2 Character LCD	Backlight, 16*2 Character LCD	Backlight, 16*2 Character LCD
Communication port	RS485 / RS232	RS485 / RS232	RS485 / RS232
Standard warranty [year]	5	5	5
Inverter Model	SolarRiver 3300TL	SolarRiver 4400TL	SolarRiver 5200TL