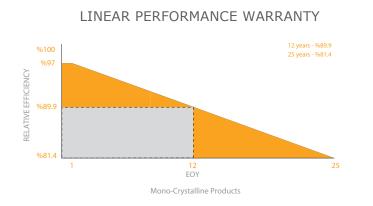
# **PS-M60 (295-3IO W) JARASH** PERC MONO-CRYSTALLINE MODULE

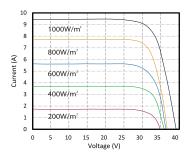




Philadelphia Solars' Mono-Crystalline modules with power up to 310 Wp are produced using the state-of-the-art (automated) robotic production lines. These modules are suitable to be used for most electrical power applications and have excellent durability to prevailing weather conditions.



IV - CURVE M60 - 295 W



## Certificates

Bankability Report DNV GL



ELECTRICAL CHARACTERISTICS		295W		300W		305W		310W
Characteristics (STC)	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Open Circuit Voltage - Voc (V)	39.56	36.76	39.75	36.84	39.83	36.89	40.0	37.01
Short Circuit Current - Isc (A)	9.6	7.76	9.70	7.79	9.75	7.82	10.07	8.17
Maximum Power Voltage - Vmpp (V)	31.6	29.33	32.06	29.60	32.32	29.82	32.5	30.18
Maximum Power Current - Impp (A)	9.35	7.49	9.37	7.51	9.44	7.57	9.55	7.64
Maximum Power - Pmax (W)	295	220	300	222	305	225.5	310	230.0
Module Efficiency - $\eta'$ (%)	18.1		18.4		18.7		19.0	

Values at Standard Test Conditions STC (Air Mass AM1.5, Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C), Values at NOCT (Air Mass AM1.5, Irradiance 800W/m<sup>2</sup>, ambient Temperature 20°C).

MATERIAL CHARACTERISTICS		PACKAGING	
Characteristics	Value	Physical Characteristics	Value
Cells per Module	60	Module Dimensions (mm)	1648 x 990 x 35
Cell Type	Grade A - Multi-Crystalline Silicon, 156.75x156.75mm	Module Weight (kg)	18
Front Surface	Anti-Reflective Coated Tempered 3.2mm Glass	Pallet Dimensions W.D.H (mm)	1715 x 1135 x 1150
Encapsulant	PID Free EVA	Modules per Pallet	30
Back Cover	Backsheet	Container Capacity	Value
Frame	Anodized Aluminum	20 Feet Container	360 Modules
Junction Box	IP68, 3 Bypass Diodes	40 Feet High-Cube Container	840 Modules
Cable and Connector	1m Solar Cables with MC4 interconnection		
Fire Classification	Spread of flame : A / Burning brand : C		

THERMAL CHARACTERISTICS		OPERATING CONDITIONS	
Characteristics	Value		
Voltage Temperature Coefficient (%/°C)	-0.291	Maximum Sytem Voltage - Vmax (V)	1000/1500
Current Temperature Coefficient (%/°C)	+0.033	Maximum Series Fuse (A)	15
Power Temperature Coefficient (%/°C)	-0.39	Operating Temperature Range (°C)	IEC: -40 to + 85
NOCT (°C)	45 <u>+</u> 2		UL: -40 to + 90

WARRANTY		
Product	12 Years	
Power Output	12 Years; 89.9 % of Power Output 25 Years; 81.4 % of Power Output	

#### **FEATURE**



Positive power tolerance up to %3 extra output.

Excellent low light performance.

Salt mist and ammonia resistant to endure coastal and agricultural environments.

Excellent high mechanical loads, certified to withstand high wind load (2400 pa) and snow load (5400 pa).

In-line and post EL (Electroluminescence) machines.

PID resistant.

#### **BENEFITS**

- Outstanding technical support.
- Pre and after sales-service.
- 12 years warranty on material and workmanship .
- 25 years linear performance warranty.
- Marketing support to official distributors.
- Customized mounting solutions.

### APPLICATIONS



• Power measuring tolerance:  $\pm$  %3, other measurements tolerances:  $\pm$  %5

• Datasheet is subjected to changes without prior notice, always obtain the most recent version of the datasheet.

• Caution: For professional use only, the installation and handling of PV modules and cleaning modules require professional skills and should only be performed by qualified professionals, please read the Installation and Operation Manual before using the modules, also Cleaning Guidelines.