

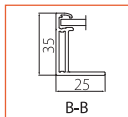
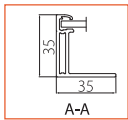
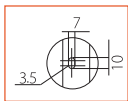
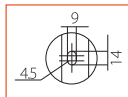


Philadelphia Solar
Delivering Clean Energy Solutions

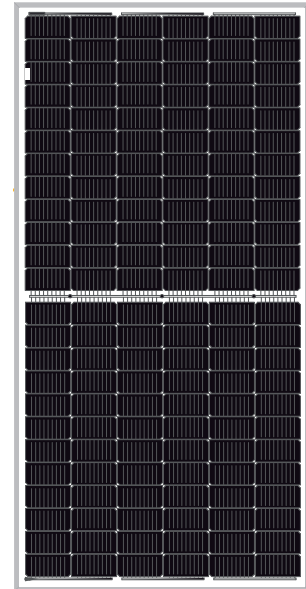
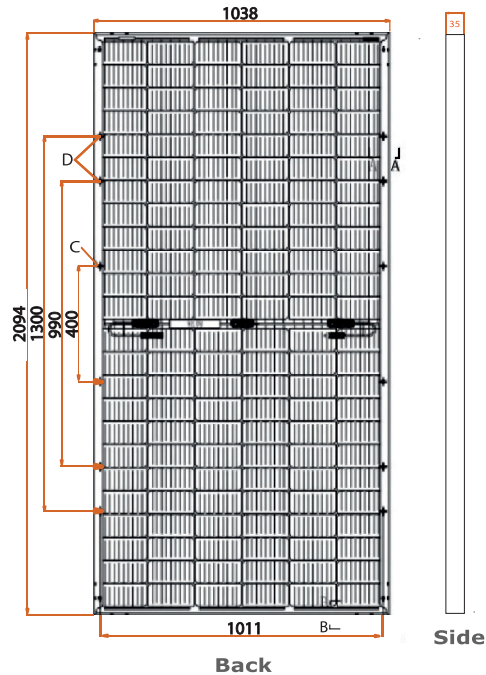
PS-M72(BFC)-xxx

Mono **PERC** Crystalline Module

Module Drawings

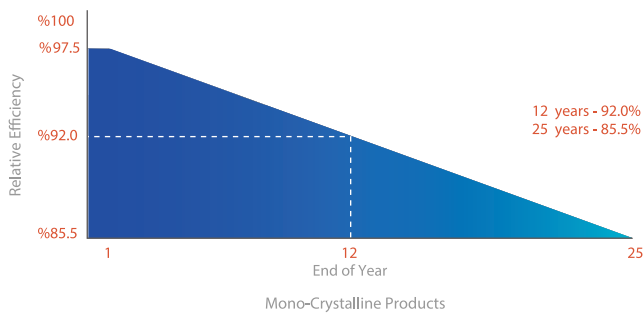


● Dimensions are in mm



Front

Linear Performance Warranty



12 Year Product Warranty



25 Year Linear Power Warranty



Only -0.5% Annual Degradation

Certificates



EN ISO 9001:2015 EN ISO 14001:2015 EN ISO 18001:2007

ELECTRICAL CHARACTERISTICS (STC)	425W	430W	435W	440W	445W	450W
Module System Voltage (v)	1500	1500	1500	1500	1500	1500
Open Circuit Voltage - Voc (V)	49	49.12	49.25	49.35	49,5	49.62
Short Circuit Current - Isc (A)	11.10	11.19	11.28	11.37	11.46	11.55
Maximum Power Voltage - Vmpp (V)	40.64	40.78	40.92	41.06	41.22	41.37
Maximum Power Current - Impp (A)	10.46	10.54	10.63	10.71	10.8	10.88
Module Efficiency - η' (%)	19.6	19.8	20.0	20.2	20,5	20.7

Values at Standard Test Conditions STC (Air Mass AM 1.5, Irradiance 1000 W/m², Cell Temperature 25°C).

MATERIAL CHARACTERISTICS		PACKAGING	
Characteristics	Value	Physical Characteristics	Value
Cells per Module	144	Module Dimensions (mm)	2094 x 1038 x 35
Cell Type	Grade A - Mono PERC Bifacial Crystalline Silicon	Module Weight (kg)	24
Front Surface	Anti-Reflective Coated Tempered 3.2 mm Glass	Packaging	Value
Encapsulant	PID Free EVA	Modules per Pallet	30
Back Cover	Backsheet (Transparent)		
Frame	Anodized Aluminum	20 Feet Container	150 Modules
Junction Box	IP 68, 3 Bypass Diodes		
Connector and Cable	MC4 interconnection, 300-mm Cables Length (Can be Customized)	40 Feet High-Cube Container	660 Modules
Fire Classification	Type I		

THERMAL CHARACTERISTICS		OPERATING CONDITIONS	
Characteristics	Value		
Open Voltage Temperature Coefficient α_{voc} (%/°C)	-0.28	Maximum Sytem Voltage - Vmax (V)	1500
Short Current Temperature Coefficient α_{isc} (%/°C)	+0.06	Maximum Series Fuse (A)	20
Power Temperature Coefficient α_{pmp} (%/°C)	-0.37	Operating Temperature Range (°C)	IEC:-40 to +85 UL:-40 to +90
NOCT (°C)	45±2		

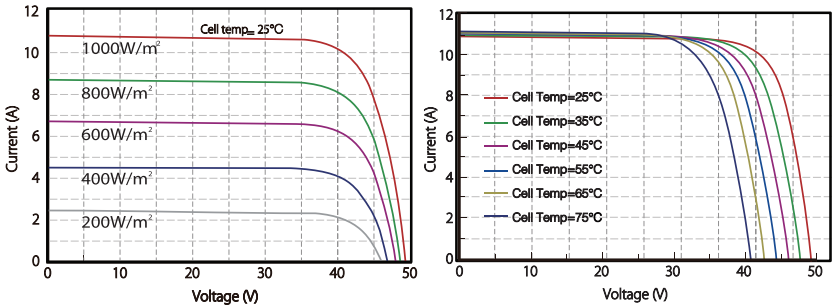
FEATURE

-  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.
- Marketing support to official distributors.
- Customized mounting solutions.

IV - Curve



Applications

-  On-Grid Residential Roof-Tops
-  On-Grid Commercial/Industrial Roof-Tops
-  Off-Grid Systems (Including Lighting Systems)
-  Solar Power Plants

- 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.