SRP-(270-285)-6PB-HV

Electrical Characteristics(STC)

Module Type	SRP-270-6PB-HV	SRP-275-6PB-HV	SRP-280-6PB-HV	SRP-285-6PB-HV
Maximum Power at STC -P_{mp} (W)	270	275	280	285
Open Circuit Voltage -V_{oc} (V)	38.1	38.3	38.5	38.7
Short Circuit Current -I_{sc} (A)	8.99	9.08	9.18	9.27
Maximum Power Voltage -V_{mp} (V)	31.3	31.6	31.8	32.0
Maximum Power Current -I_{mp} (A)	8.63	8.71	8.81	8.91
Module Efficiency STC-η_m(%)	16.50	16.80	17.11	17.41
Optimizer Max.Output Voltage (V)	35.0			
Power Tolerance（W）	(0,+4.99)			
Maximum System Voltage (V)	1500			
Maximum Series Fuse Rating (A)	15			

Temperature Characteristics

Pmax Temperature Coefficient	-0.36 %/°C
Voc Temperature Coefficient	-0.30 %/°C(0%/°C at voltage limiting)
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

Packing Configuration

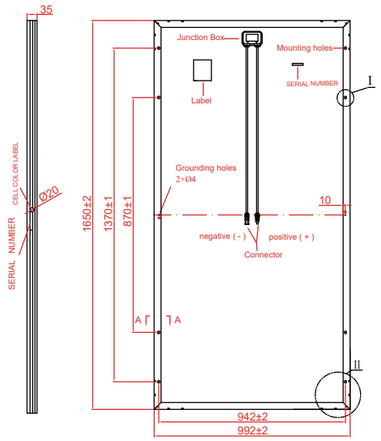
	1650 x 992 x 35 mm		
Container	20'GP	40'GP	40'HQ
Pieces per Pallet	30	30	30+2*
Pallets per Container	12	28	28
Pieces per Container	360	840	896

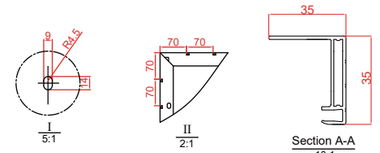
* 30+2 pieces per pallet is the special package which only suits for container transport.For details,please consult SERAPHIM.

Mechanical Specifications

External Dimensions	1650 x 992 x 35 mm
Weight	18.0 kg
Solar Cells	Poly crystalline 6 inch(60pcs)
Front Glass	3.2 mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68
Output Cables	4 mm² ,cable length:1000 mm
Connector	MC4 Compatible

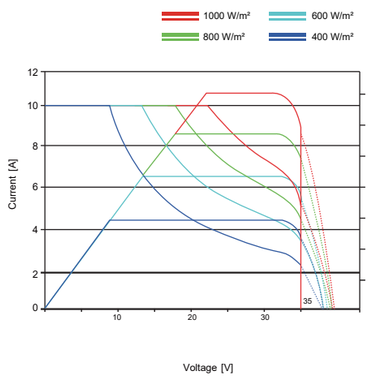
STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5
NOCT: Irradiance 800 W/m², ambient temperature 20°C, wind speed :1m/s
Specifications are subject to change without further notification.





* All Dimensions in mm
* The above drawing is a graphical representation of the product.

I-V CURVE (MPPT MODE)



Optimized by maxim integrated.
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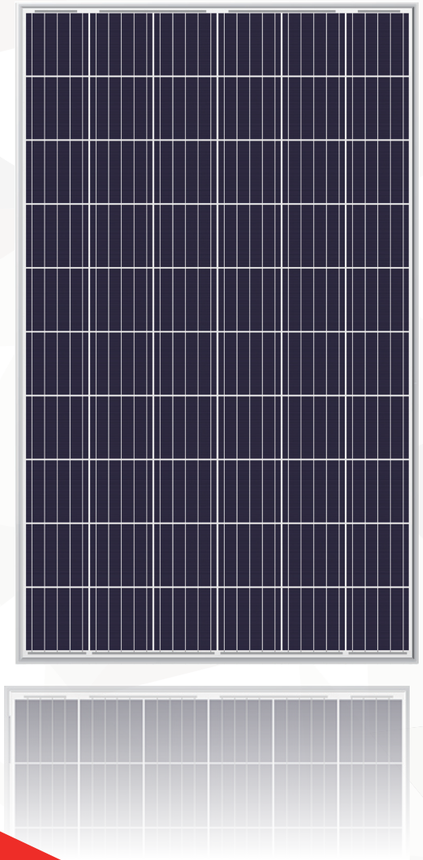
SERAPHIM®





SERAPHIM MX 1500V

SRP-(270-285)-6PB-HV

SERAPHIM MX

SRP-(270-285)-6PB-HV



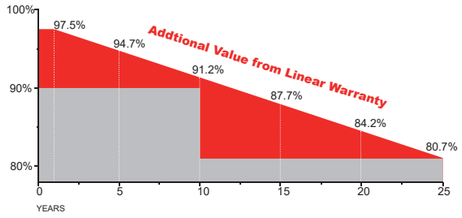
MANAGEMENT SYSTEM

ISO 9001: Quality management system

ISO 14001: Standard for environmental management system

OHSAS 18001: International standard for occupational health and safety assessment system

WARRANTY



10 YEARS Guarantee on product material and workmanship

25 YEARS Linear power output warranty

Optimized by maxim integrated.

Provide flexibility to system design

Allows 20~35% more modulesper string saving BoS cost

Advanced

Higher power density

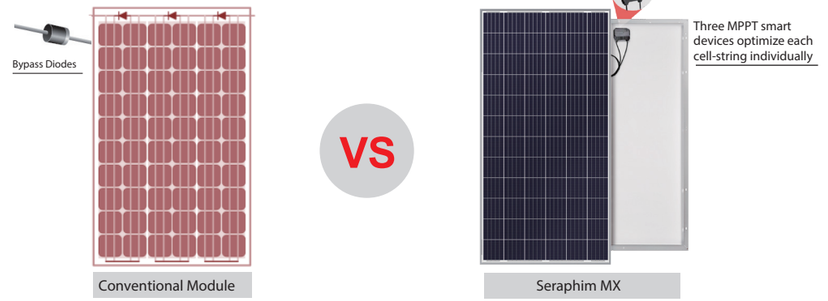
Enhanced energy harvest

1500V

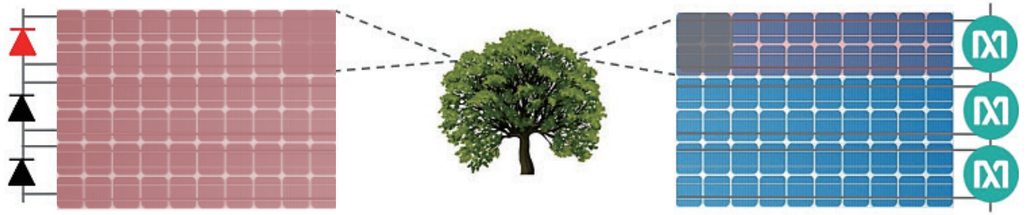
Withstand and applicable up to 1500V high system voltage

Reduced shading effect
Prevent Hot-spot

Comparing with conventional product, Seraphim integrated cell-string level optimizer into solar panel and redesigned the module. Trying best to provide advanced smart solution to customers, and improve performance &reliability of the solar panels.



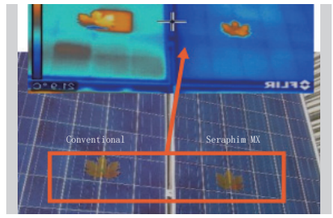
Under any condition, the Seraphim MX can optimize power output to enhance energy harvest. However, conventional modules or panel optimizer product will bypass cell-strings When they underperform. So Seraphim MX will give higher energy production,eliminate hot-spots issues.



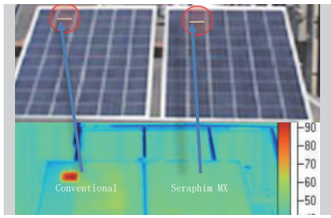
Conventional Module or Panel Optimizer
175W=90W+90W-5W

Seraphim MX
225W=90W+90W+45W

Seraphim MX reduces the shading effect significantly, prevents hot-spot formation, and eliminates diode failures. In the meantime, it will lower Operation and Maintenance costs.



Leaf thermal test



IEC hot-spot test



Nearby Shading,
Soiling and inter-row shading

Seraphim MX enables flexible PV system design. Best performance with easiest installation.



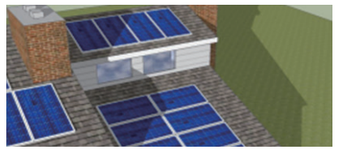
Combine strings of differentlength

i.e. 10 panels in parallel with 12:
+5% energy increase1



Series connect panels facing different directions

i.e. 10 East panels in series with West panels:
+12% energy increase1



Series connect panels facing different tilts

i.e. 10 panels in series with 25panels:
+1.6% energy increase1

Note: From simulations of PV System in San Jose, CA