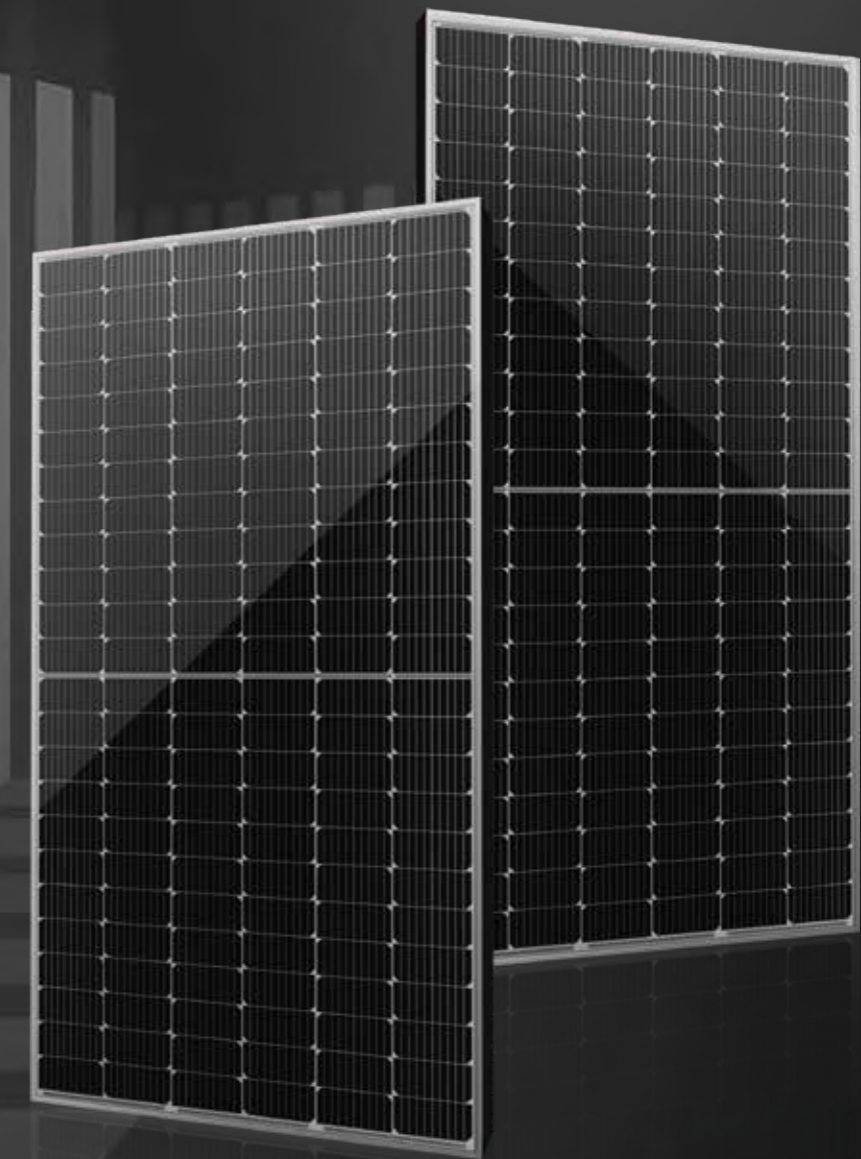


# 166 HALF-CELL SERIES

Multiple Upgrades Were Forged Into One



**350W-370W**

**166 Half-Cell Series – The Amalgamation Of Advanced Technologies**

Seraphim redefined the high-efficiency module series by integrating 166mm silicon wafers with multi-busbar and half-cut cell technologies. The maximum module efficiency of the new 166 half-cell series is 20%, and the maximum power output is 375W.

**Less Mismatch Loss**

Instead of 6 internal strings of cells, the 166 HALF-CELL series module has 2 x 6 shorter ones. This design effectively deals with the mismatch happened between cells caused by shadow, out of sync performance degradation, ect.

**Less Internal Power Loss**

The ribbon length of half-cell is shorter than normal cell. Calculated by Joule's law and Ohm' law, the power loss reduction is nearly 6%.

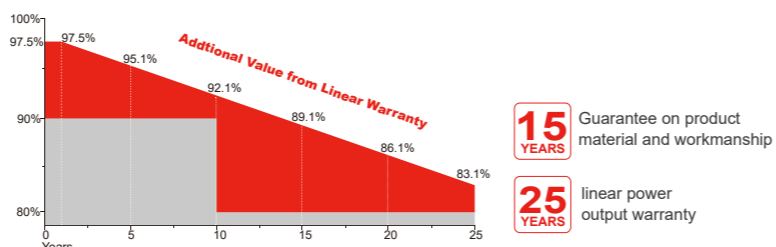
**Product Certificates**



**Insurance**



**Warranty**

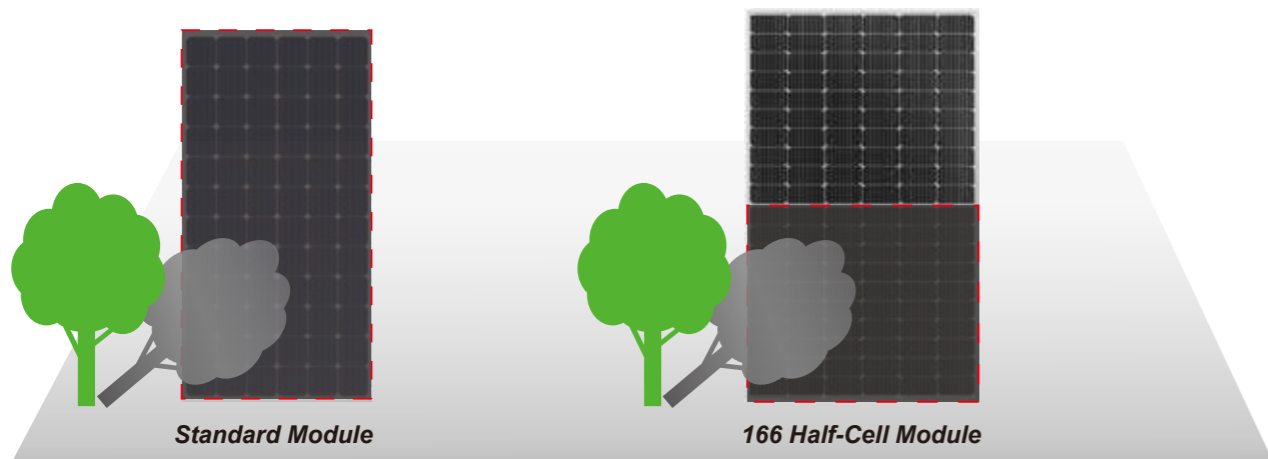


**More Benefits**

- Higher module conversion efficiency up to 20%
- Outstanding performance at low irradiance
- Less mismatch and parallel design reduce shading impact
- Excellent temperature dependent performance
- Lower risk of hot spot effects
- Significantly lower LCOE, and BoS cost savings

**More Energy Yield, Less System CAPEX**

Affected by a significant increase in product power, the application of the new 166 half-cell series in large commercial and utility power stations can significantly reduce LCOE, BOS, EPC and land costs. Projects over 1MW can save at least 5% CAPEX per watt by using new 166 half-cell series modules instead of standard modules.



**Electrical Characteristics**

Module Type	SRP-350-BMB		SRP-360-BMB		SRP-365-BMB		SRP-370-BMB	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power at STC (Pmp)	350	260	360	268	365	271	370	275
Open Circuit Voltage (Voc)	40.8	38.1	41.2	38.5	41.4	38.7	41.6	38.9
Short Circuit Current (Isc)	10.99	8.79	11.16	8.88	11.26	8.92	11.34	9.01
Maximum Power Voltage (Vmp)	33.8	31.4	34.2	31.8	34.4	32.0	34.6	32.2
Maximum Power Current (Imp)	10.37	8.30	10.53	8.43	10.62	8.47	10.70	8.55
Module Efficiency at STC(ηm)	18.73		19.27		19.54		19.80	
Power Tolerance	(0,+4.99)							
Maximum System Voltage	1000 VDC							
Maximum Series Fuse Rating	20A							

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25 °C AM=1.5  
 Power measurement tolerance: +/-3%; Voltage measurement tolerance: +/-2%; Current measurement tolerance: +/-4%  
 NOCT: Irradiance 800 W/m<sup>2</sup> ambient temperature 20 °C wind speed :1m/s  
 Power measurement tolerance: +/-3%; Voltage measurement tolerance: +/-2%; Current measurement tolerance: +/-4%

**Temperature Characteristics**

Pmax Temperature Coefficient	-0.36 %/°C
Voc Temperature Coefficient	-0.28 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

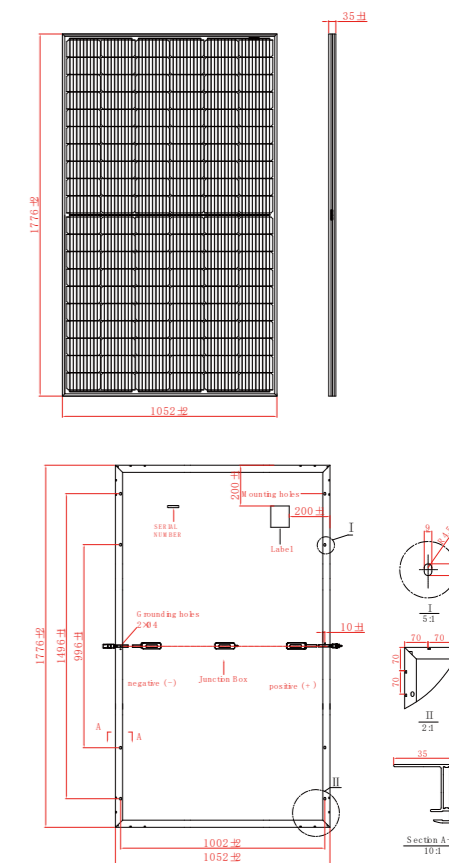
**Mechanical Specifications**

External Dimensions	1776 x 1052 x 35 mm
Weight	20.0kg
Solar Cells	PERC Mono crystalline 166 x 83mm (120pcs)
Front Glass	3.2 mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68,3 diodes
Output Cables	4.0 mm <sup>2</sup> , Portrait:255mm(+)/355mm(-); Landscape:1300mm
Mechanical Load	Front side 5400Pa/ Rear side 2400Pa
Connector	Genuine MC4 / TT01 / TT02 / 05-6 / 05-8
Fire Safety Class	Class C

**Packing Configuration**

	1776 x 1052 x 35 mm		
Container	20'GP	40'GP	40'HQ
Pieces per Pallet	31	31	31+1*
Pallets per Container	6	24	24
Pieces per Container	186	744	768

\* 31+1 pieces per pallet is the special package which only suits for container transport. For details, please consult SERAPHIM.



**I-V Curve**

