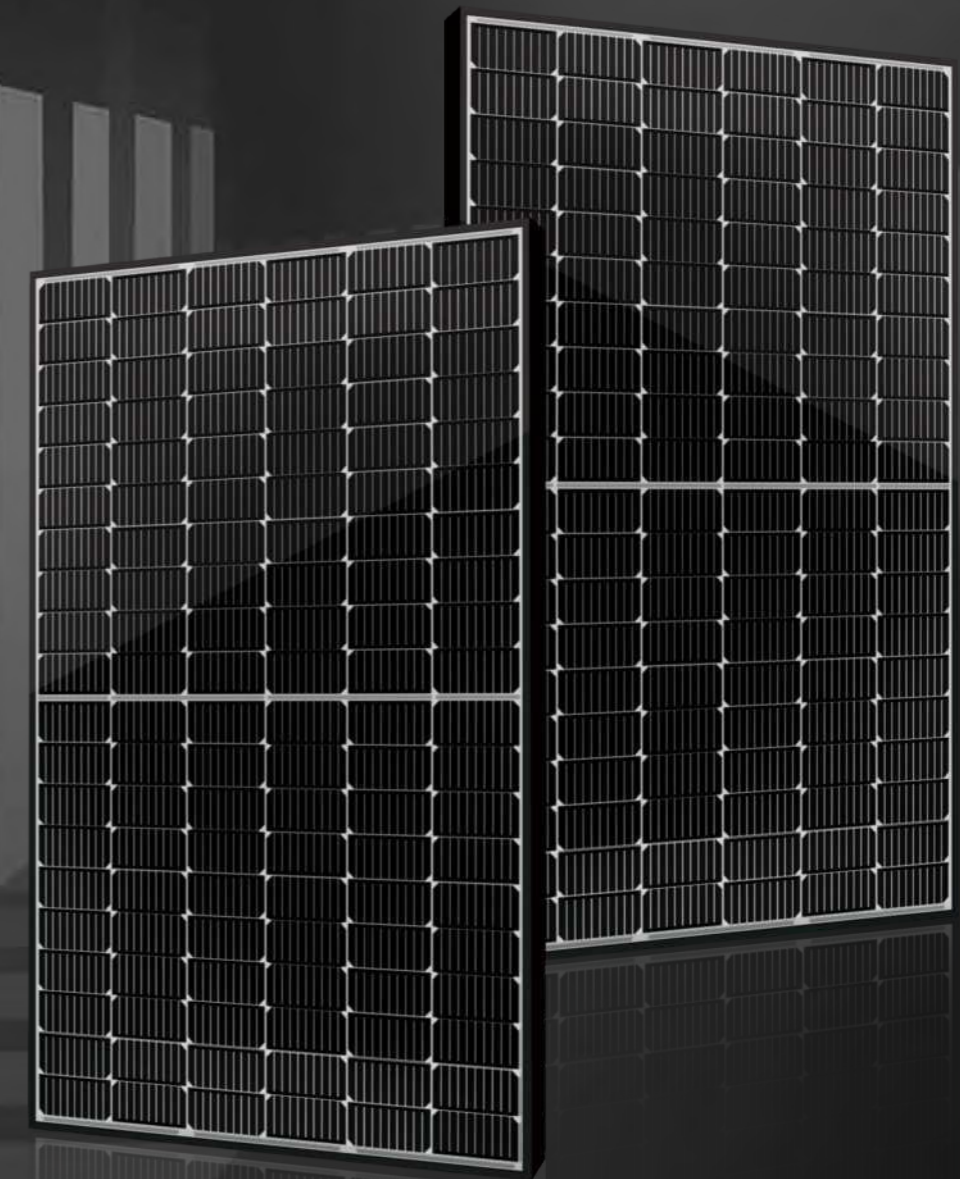


# 166 HALF-CELL SERIES

Multiple Upgrades Were Forged Into One



**360W–375W**



## 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%.

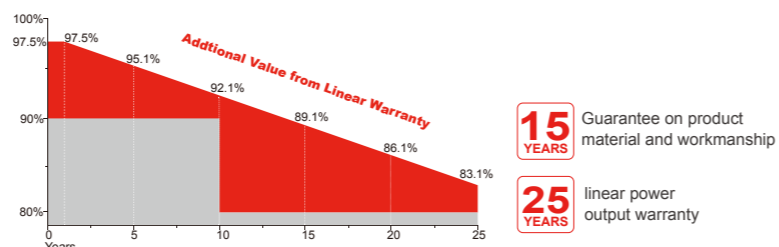
### Product Certificates



### Insurance



### Warranty

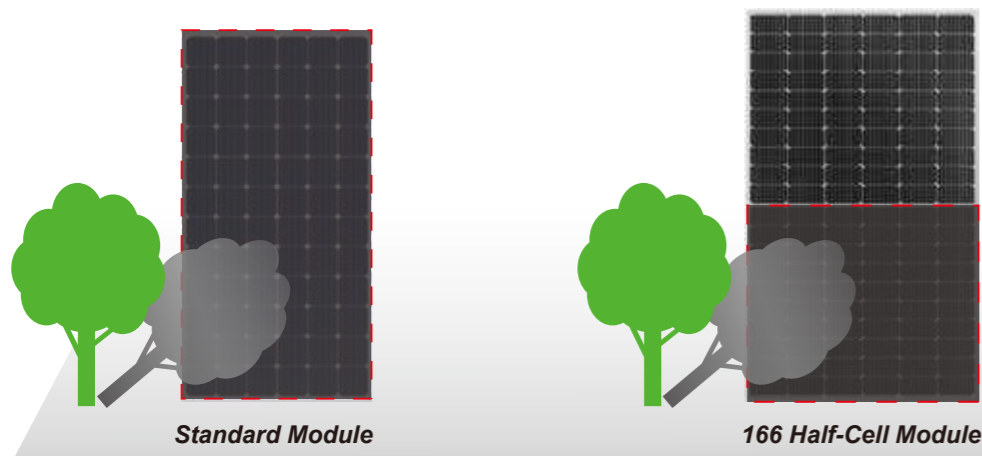


### More Benefits

- 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-360-BMB | SRP-365-BMB | SRP-370-BMB | SRP-375-BMB |
|------------------------------|-------------|-------------|-------------|-------------|
|                              | STC         | STC         | STC         | STC         |
| Maximum Power at STC (Pmp)   | 360         | 365         | 370         | 375         |
| Open Circuit Voltage (Voc)   | 41.2        | 41.4        | 41.6        | 41.8        |
| Short Circuit Current (Isc)  | 11.16       | 11.26       | 11.34       | 11.41       |
| Maximum Power Voltage (Vmp)  | 34.2        | 34.4        | 34.6        | 34.8        |
| Maximum Power Current (Imp)  | 10.53       | 10.62       | 10.70       | 10.78       |
| Module Efficiency at STC(ηm) | 19.27       | 19.54       | 19.80       | 20.07       |
| 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;

## 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      |

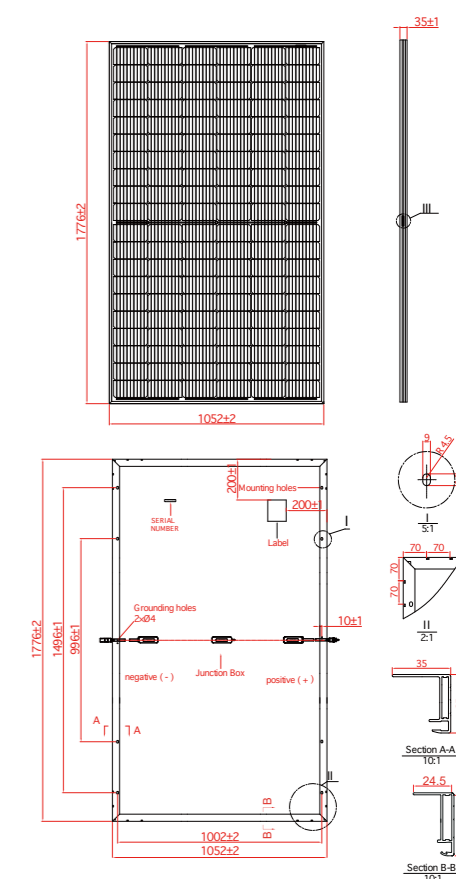
## Mechanical Specifications

|                     |  |
|---------------------|--|
| External Dimensions | 1776 x 1052 x 35 mm  |
| Weight              | 20.0kg   |
| Solar Cells         | PERC Mono (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 |
| Connector           | MC4 Compatible   |
| Mechanical Load     | Front side 5400Pa/ Rear side 2400Pa                                |

## Packing Configuration

|                       | 1776 x 1052 x 35 mm |       |       |
|-----------------------|---------------------|-------|-------|
| Container             | 20'GP               | 40'GP | 40'HQ |
| Pieces per Pallet     | 30                  | 30    | 30+1* |
| Pallets per Container | 6                   | 24    | 24    |
| Pieces per Container  | 180                 | 720   | 744   |

\* 27+1 pieces per pallet is the special package which only suits for container transport. For details, please consult SERAPHIM.



## I-V Curve

