

# NPV510-550MP/MBB



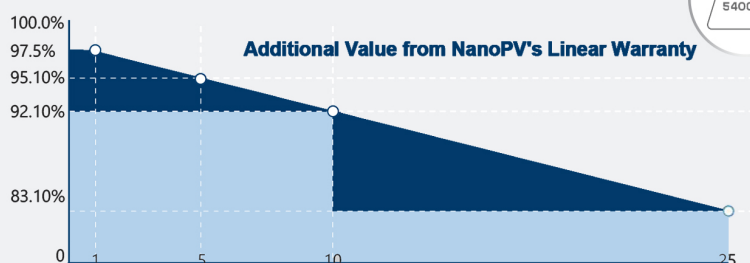
Upto  
550watts

## Mono Crystalline Half 144 Cells 510-550 watt



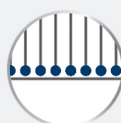
**144** MonoCrysline  
PERC Module

### LINEAR PERFORMANCE WARRANTY



**12years** Product Material & Workmanship

**25years** Linear Performance Warranty



#### IMPROVED FIELD RELIABILITY

MBB solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.



#### SUPERIOR PERFORMANCE

Functions like two parallel modules, enabling the half-cell string to work in partial shading



#### EXCELLENT ANTI-PID PERFORMANCE GUARANTEE

Limited power degradation for mass production.



#### LOWER TEMPERATURE COEFFICIENTS

Enhance power generation Reduce Shadow Loss



#### LOW-LIGHT PERFORMANCE

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.



#### BETTER MICRO CRACK RESISTANCE

Minimize the impact by micro crack by limiting cell damage and potentially extending area



#### SEVERE WEATHER RESISTANCE

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

**25** Years  
of Making  
a Excellence

### Address

NanoPV Solar Inc. Ted Baldwin  
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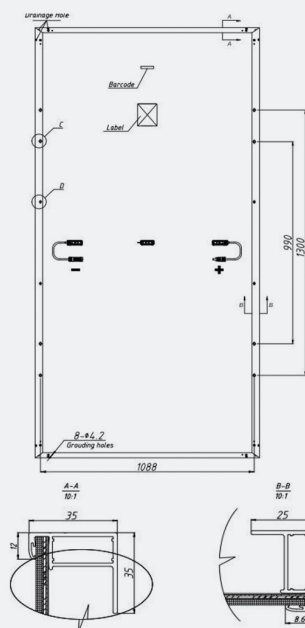
### PRODUCT CERTIFICATION



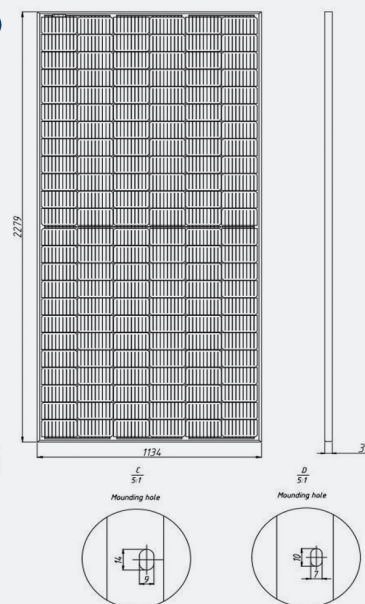
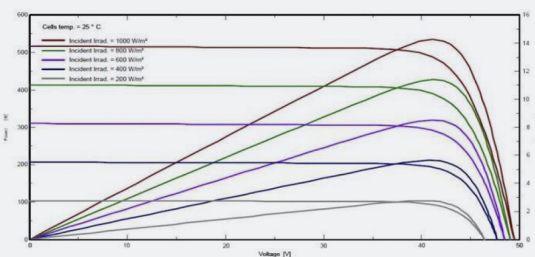
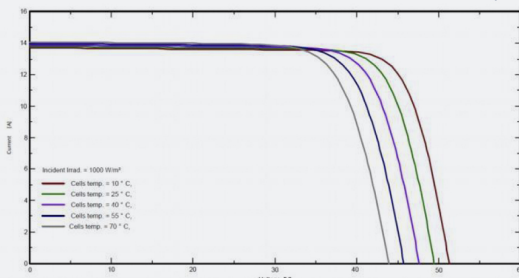
ISO9001  
ISO14001  
OHSAS18001  
IEC TS 62941



# NPV510-550MP/MBB



I-V CURVE AT DIFFERENT WORKING TEMPERATURE AND IRRADIANCE(535W)



## ELECTRICAL DATA

| Module Type                     | NPV/530       |       | NPV/535 |       | NPV/540 |       | NPV/545 |       | NPV/550 |       |
|---------------------------------|---------------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
|                                 | STC           | NMOT  | STC     | NMOT  | STC     | NMOT  | STC     | NMOT  | STC     | NMOT  |
| Peak Power (Pmax) (W)           | 530           | 401   | 535     | 405   | 540     | 408   | 545     | 412   | 550     | 416   |
| Maximum Power Voltage(Vmp) (V)  | 41.3          | 38.6  | 41.5    | 38.8  | 41.6    | 39.0  | 41.8    | 39.2  | 42.0    | 39.4  |
| Maximum Power Current(Imp) (A)  | 12.83         | 10.39 | 12.90   | 10.43 | 12.97   | 10.47 | 13.04   | 10.51 | 13.11   | 10.55 |
| Open-circuit Voltage (Voc) (V)  | 49.3          | 46.2  | 49.5    | 46.3  | 49.6    | 46.4  | 49.7    | 46.6  | 49.9    | 46.6  |
| Short-circuit Current (Isc) (A) | 13.72         | 11.01 | 13.79   | 11.05 | 13.86   | 11.09 | 13.93   | 11.13 | 14.00   | 11.17 |
| Module Efficiency               | 20.50%        |       | 20.70%  |       | 20.89%  |       | 21.08%  |       | 21.28%  |       |
| Operating Temperature           | -40°C ~ +85°C |       |         |       |         |       |         |       |         |       |
| Maximum System Voltage          | 1500V         |       |         |       |         |       |         |       |         |       |
| Maximum Series Fuse Rating      | 20A           |       |         |       |         |       |         |       |         |       |
| Protection Class                | Class II      |       |         |       |         |       |         |       |         |       |
| Power tolerance                 | 0 ~ +5W       |       |         |       |         |       |         |       |         |       |

\*STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, AM 1.5

\*NMOT(Under Nominal Module Operating Temperature), Irradiance of 800W/m<sup>2</sup>, Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

## TEMPERATURE CHARACTERISTICS

|                                 |        |
|---------------------------------|--------|
| Temperature coefficient of Pmax | -0.38% |
| Temperature coefficient of Voc  | -0.30% |
| Temperature coefficient of Isc  | 0.06%  |
| NMOT                            | 44±2°C |

## PACKING MANNER

|                  |      |
|------------------|------|
| Packing Type     | 40HQ |
| Piece/Pallet     | 31   |
| Pallet/Container | 22   |
| Piece/Container  | 682  |

NanoPV Solar might make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet.

\*Power measurement tolerance: ±3%

## MECHANICAL DATA

|                   |                            |
|-------------------|----------------------------|
| Cell Type         | Mono-Crystalline           |
| Cell Arrangement  | 144pcs (2×(6×12))          |
| Dimension (L×W×H) | 2279×1134×35mm             |
| Weight            | 28.2kg                     |
| Front Cover       | 3.2mm Tempered Glass       |
| Frame             | Anodized Aluminium Alloy   |
| Junction Box      | IP68, 3 Bypass Diodes      |
| Cable             | 4mm <sup>2</sup> /300mm    |
| Connector         | Staubli EVO2 or Compatible |
| Snow/Wind Load    | 5400Pa/2400Pa              |

## Address

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