



## NPV120-9-630BN

- **120 CELL**  
MonoNPV Type
- **1500VDC**  
Maximum System Voltage
- **605-630Wp**  
Power Output Range
- **22.3%**  
Maximum Efficiency



### KEY SALIENT FEATURES



Global, bankable brand, with independently certified state-of-the-art automated manufacturing



Industry leading lowest thermal co-efficient of power



Industry leading 12 years product warranty



Excellent low irradiance performance



Excellent PID resistance



Positive power tolerance of 0~+3%



Dual stage 100% EL Inspection warranting defect-free product



Module Imp binning radically reduces string mismatch losses



Excellent wind load 2400Pa & snow load 5400Pa under certain installation method



Comprehensive product and system certification

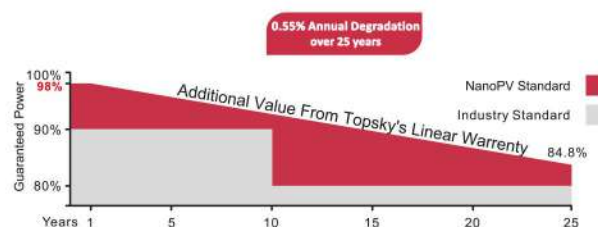
- IEC61215:2016; IEC61730-1/-2:2016;
- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- ISO 45001:2018 Occupational Health and Safety Management System

### HIGH PERFORMANCE N-TYPE

### NPV TYPE MONOCRYSTALLINE MODULE

### LINEAR PERFORMANCE WARRANTY

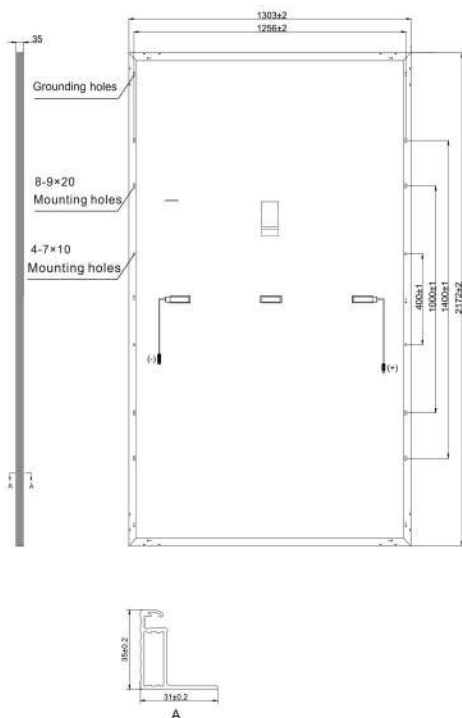
12 year Product Warranty / 25 year Linear Power Warranty



★ Please check the valid version of Limited Product Warranty which is officially released by NanoPV

## Dimensions of PV Module

Unit: mm



## ELECTRICAL DATA (STC)

| Model Number                  | NPV120-9-605BN | NPV120-9-610BN | NPV120-9-615BN | NPV120-9-620BN | NPV120-9-625BN | NPV120-9-630BN |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Rated Power in Watts-Pmax(Wp) | 605            | 610            | 615            | 620            | 625            | 630            |
| Open Circuit Voltage-Voc(V)   | 42.92          | 43.05          | 43.23          | 43.40          | 43.57          | 43.75          |
| Short Circuit Current-Isc(A)  | 17.81          | 17.89          | 17.96          | 18.03          | 18.10          | 18.17          |
| Maximum Power Voltage-Vmpp(V) | 35.51          | 35.96          | 36.13          | 36.30          | 36.47          | 36.63          |
| Maximum Power Current-Impp(A) | 16.90          | 16.97          | 17.03          | 17.08          | 17.15          | 17.21          |
| Module Efficiency (%) ★       | 21.4           | 21.6           | 21.7           | 21.9           | 22.1           | 22.3           |

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

★ Module Efficiency (%): Round-off to the nearest number

## ELECTRICAL DATA (NMOT)

| Model Number                  | NPV120-9-605BN | NPV120-9-610BN | NPV120-9-615BN | NPV120-9-620BN | NPV120-9-625BN | NPV120-9-630BN |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Rated Power in Watts-Pmax(Wp) | 458.2          | 462.0          | 465.8          | 469.4          | 473.5          | 477.2          |
| Open Circuit Voltage-Voc(V)   | 39.92          | 40.04          | 40.21          | 40.36          | 40.52          | 40.69          |
| Short Circuit Current-Isc(A)  | 14.61          | 14.67          | 14.73          | 14.79          | 14.84          | 14.90          |
| Maximum Power Voltage-Vmpp(V) | 33.23          | 33.37          | 33.53          | 33.69          | 33.84          | 33.99          |
| Maximum Power Current-Impp(A) | 13.79          | 13.84          | 13.89          | 13.93          | 13.99          | 14.04          |

NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

## MECHANICAL DATA

|                    |                                                                              |
|--------------------|------------------------------------------------------------------------------|
| Solar cells        | N-Type Topcon Monocrystalline                                                |
| Cell configuration | 120 cells (6×10×6×10)                                                        |
| Module dimensions  | 2172×1303×35mm                                                               |
| Weight             | 30kg                                                                         |
| Superstrate        | High Transmission, Low Iron, Tempered ARC Glass                              |
| Substrate          | White Back-sheet                                                             |
| Frame              | Anodized Aluminium Alloy, Silver Color                                       |
| J-Box              | Potted, IP68, 1500VDC, 3 Schottky bypass diodes                              |
| Cables             | 4.0mm <sup>2</sup> , Positive(+)350mm, Negative(-)230mm (Connector Included) |
| Connector          | IP68                                                                         |

## TEMPERATURE & MAXIMUM RATINGS

|                                             |             |
|---------------------------------------------|-------------|
| Nominal Module Operating Temperature (NMOT) | 44°C±2°C    |
| Temperature Coefficient of Voc              | -0.25%/°C   |
| Temperature Coefficient of Isc              | 0.04%/°C    |
| Temperature Coefficient of Pmax             | -0.34%/°C   |
| Operational Temperature                     | -40°C~+85°C |
| Maximum System Voltage                      | 1500VDC     |
| Max Series Fuse Rating                      | 30A         |
| Limiting Reverse Current                    | 30A         |

## PACKAGING CONFIGURATION

|                                        |                |
|----------------------------------------|----------------|
|                                        | 40ft(HQ)       |
| Number of modules per container        | 558            |
| Number of modules per pallet           | 31             |
| Number of pallets per container        | 18             |
| Packaging box dimensions (LxWxH) in mm | 1320×1120×2310 |
| Box gross weight[kg]                   | 971            |

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document.

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