



# NPV144-540M MB-8

- HALF-CELL MONO MODULE
- Positive power tolerance of 0~+3%
- IEC61215/IEC61730
- ISO9001:2015 ISO14001:2015



## Mono Crystalline Half 144 Cells 525-555 watt



### MBB Busbar Solar Cell

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



### High Efficiency

Higher module conversion efficiency (up to 21.50%) benefit from half cell structure (low resistance characteristic).



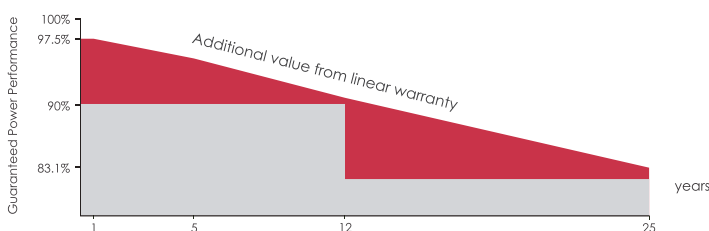
### PID RESISTANT:

Excellent Anti-PID performance guarantee limited power degradation for mass production.

### ► Superior Warranty

#### NanoPV SOLAR PERFORMANCE WARRANTY

- linear performance warranty
- Standard performance warranty



### Low-light Performance

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



### Severe Weather Resilience

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



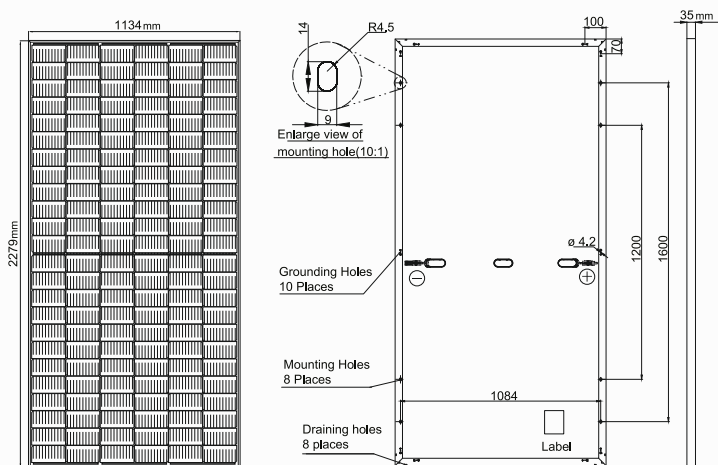
### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV Rheinland.

### ► Comprehensive Certificates

- IEC61215/IEC61730/IEC61701/IEC62716
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO14064: Greenhouse Gases Emissions Verification
- OHSAS 18001: Occupation Health and Safety Management System

## ► DIMENSIONS OF PV MODULE(mm)



## ► MECHANICAL DIAGRAMS

|               |  |
|---------------|--|
| Cell Type     | Mono PERC 182x91mm   |
| No. of Cells  | 6x12x2   |
| Dimensions    | 2279x1134x35mm   |
| Weight        | 28.6kg   |
| Front Glass   | 3.2mm Anti-Reflection coating, High Transmission, Low Iron, Tempered Glass |
| Frame         | Anodized Aluminium Alloy   |
| J-Box         | IP68 rated   |
| Output Cables | TUV 1x4.0mm <sup>2</sup> , Length 300*/400- (mm) length can be customized  |

## ► Electrical Characteristics

| Module Type                 | NPV144-525M/MB-8 |        | NPV144-530M/MB-8 |        | NPV144-535M/MB-8 |        | NPV144-540M/MB-8 |        | NPV144-545M/MB-8 |        | NPV144-550M/MB-8 |        | NPV144-555M/MB-8 |        |
|-----------------------------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|
|                             | STC              | NOCT   | STC              | NOCT   | STC              | NOCT   | STC              | NOCT   | STC              | NOCT   | STC              | NOCT   | STC              | NOCT   |
| Maximum Power (Pmax)        | 525Wp            | 397Wp  | 530Wp            | 401Wp  | 535Wp            | 405Wp  | 540Wp            | 408Wp  | 545Wp            | 412Wp  | 550Wp            | 416Wp  | 555Wp            | 420Wp  |
| Maximum Power Voltage (Vmp) | 41.15V           | 38.36V | 41.31V           | 38.57V | 41.47V           | 38.78V | 41.64V           | 38.99V | 41.80V           | 39.20V | 41.96V           | 39.43V | 42.13V           | 39.64V |
| Maximum Power Current (Imp) | 12.76A           | 10.35A | 12.83A           | 10.39A | 12.90A           | 10.43A | 12.97A           | 10.47A | 13.04A           | 10.51A | 13.11A           | 10.55A | 13.18A           | 10.59A |
| Open-circuit Voltage (Voc)  | 49.30V           | 46.05V | 49.37V           | 46.18V | 49.45V           | 46.31V | 49.60V           | 46.43V | 49.75V           | 46.55V | 49.82V           | 46.68V | 49.90V           | 46.90V |
| Short-circuit Current (Isc) | 13.72A           | 10.97A | 13.75A           | 11.01A | 13.79A           | 11.05A | 13.86A           | 11.09A | 13.93A           | 11.13A | 13.96A           | 11.17A | 14.00A           | 11.21A |
| Module Efficiency (STC%)    | 20.30%           |        | 20.50%           |        | 20.70%           |        | 20.90%           |        | 21.10%           |        | 21.30%           |        | 21.50%           |        |

## ► Temperature Ratings

|   |             |
|---|-------------|
| NMOT (Nominal Module Operating Temperature) | 45°C(±2°C)  |
| Temperature Coefficient of Pmax             | - 0.37%/°C  |
| Temperature Coefficient of Voc              | - 0.286%/°C |
| Temperature Coefficient of Isc              | 0.057%/°C   |

## ► Maximum Ratings

|                         |                    |
|-------------------------|--------------------|
| Operational Temperature | - 40~+85°C         |
| Maximum System Voltage  | 1000/1500VDC (IEC) |
| Max Series Fuse Rating  | 25A                |

## ► Warranty

|                                       |
|---------------------------------------|
| 12 Years Product Workmanship Warranty |
| 25 Years Power Warranty               |

## ► Packaging Configuration

|                            |        |
|----------------------------|--------|
| Modules per pallet         | 31pcs  |
| Modules per 40HQ container | 620pcs |

## ► I-V-Curve

