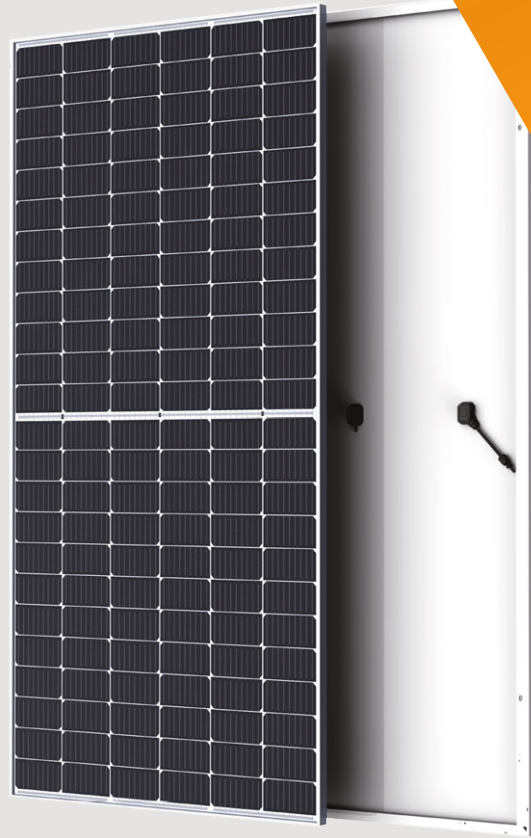




# NPV144-450M / MB-7

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



## Mono Crystalline Half 144 Cells 435-460 watt



### MBB Busbar Solar Cell

MBB 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 21.30%) benefit from half cell structure (low resistance characteristic).



### PID Resistance

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



### 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).

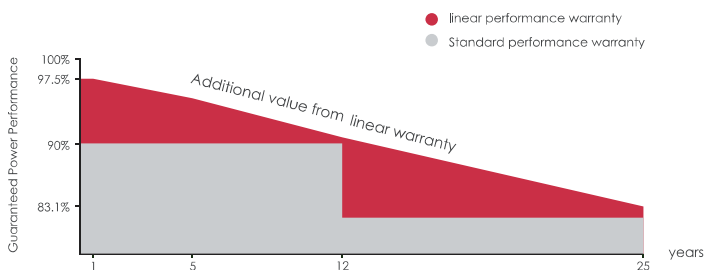


### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV Rheinland.

## ► Superior Warranty

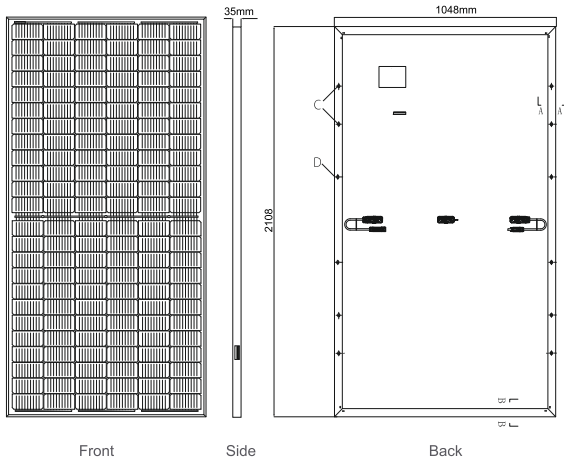
### SOLAR PERFORMANCE WARRANTY



## ► 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 166x83mm
No. of Cells	6x12x2
Dimensions	2108x1048x35mm
Weight	23.5 kg
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	NPV144-435M/MB-7		NPV144-440M/MB-7		NPV144-445M/MB-7		NPV144-450M/MB-7		NPV144-455M/MB-7		NPV144-460M/MB-7	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax)	435Wp	322.2Wp	440Wp	326.0Wp	445Wp	329.7Wp	450Wp	333.4Wp	455Wp	337.1Wp	460Wp	340.8Wp
Maximum Power Voltage(Vmp)	40.90V	37.80V	41.10V	38.00V	41.30V	38.10V	41.50V	38.30V	41.70V	38.50V	41.90V	38.70V
Maximum Power Current(Imp)	10.64A	8.53A	10.71A	8.59A	10.78A	8.64A	10.85A	8.70A	10.92A	8.76A	10.98A	8.82A
Open-circuit Voltage(Voc)	48.70V	45.50V	48.90V	45.70V	49.10V	45.90V	49.30V	46.10V	49.50V	46.30V	49.70V	45.50V
Short-circuit Current(Isc)	11.39A	9.18A	11.46A	9.21A	11.53A	9.30A	11.60A	9.35A	11.67A	9.40A	11.78A	9.45A
Module Efficiency STC(%)	19.7%		19.9%		20.1%		20.3%		20.5%		20.7%	

## ► Temperature Ratings

NMOT (Nominal Module Operating Temperature)	45°C(±2°C)
Temperature Coefficient of P <sub>MAX</sub>	- 0.37%/°C
Temperature Coefficient of Voc	-0.286%/°C
Temperature Coefficient of Isc	0.057%/°C

## ► Maximum Ratings

Operatoinal Temperature	- 40~+85°C
Maximum System Voltage	1000/1500VDC (IEC)
Max Series Fuse Rating	20A

## ► Warranty

12 Years Product Workmanship Warranty
25 Years Power Warranty

## ► Packaging Configuration

Modules per pallet	30pcs
Modules per 40HQ container	660pcs

## ► I-V-Curve

Current-Voltage & Power-Voltage Curves

