

# EM-N48MJ

## 430-450

**BIFACIAL MODULE WITH DUALGLASS**

N-TYPE

## 0~+5W

POSITIVE POWER TOLERANCE

IEC61215(2021), IEC61730(2023)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational health and safety management systems

### KEY FEATURES



#### SMBB technology

Better current collection to improve module power output and reliability.



#### Bifacial power generation

Power generation can reach up to 25% maximum, significantly improving power generation gain and reducing LCOE.



#### Anti-PID technology

Excellent Anti-PID performance via highly reliable cell and material technology



#### Low attenuation technology

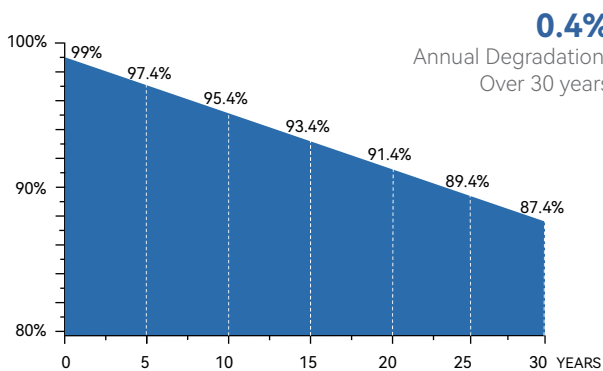
Lower LID / LETID attenuation with high reliable N-type module



#### Excellent temperature coefficient

Ensure high power generation in low temperature areas.

### LINEAR PERFORMANCE WARRANTY

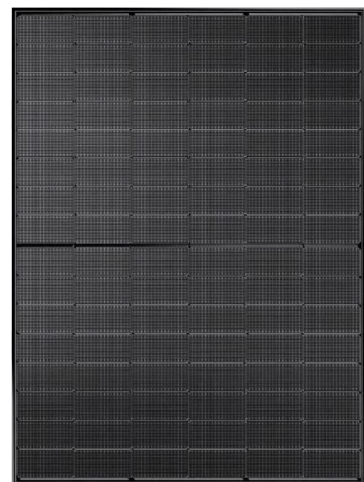


**15**  
YEARS

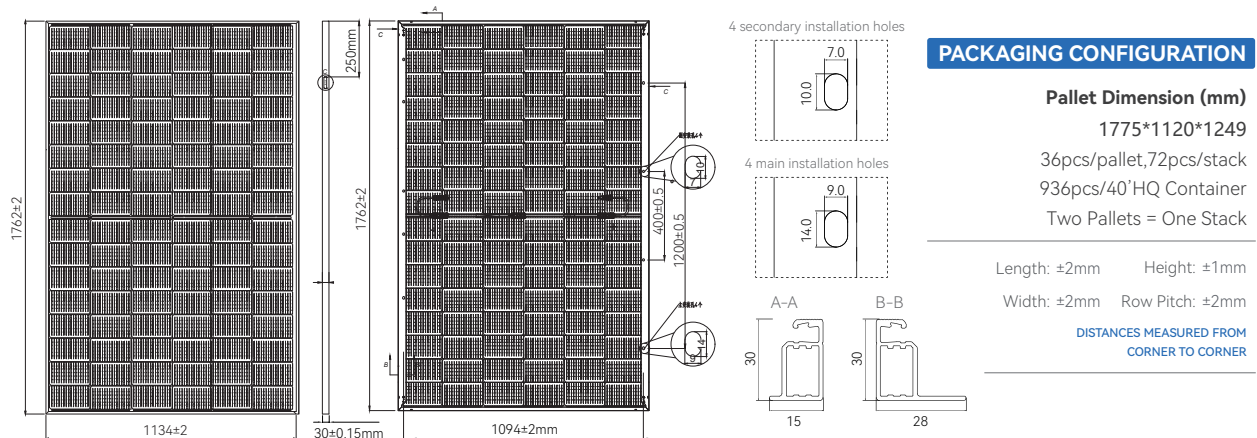
Year Product Warranty

**30**  
YEARS

Year Linear Power Warranty



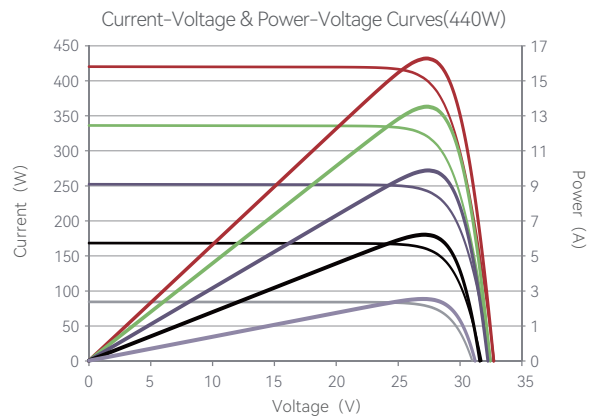
ASSEMBLY DRAWING



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	96 (6×16)
Dimensions	1762×1134×30mm
Weight	20.9kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	Transparent back sheet
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>2</sup> (+): 300mm, (-): 200mm or Customized Length

Electrical Performance & Temperature Dependence



MODULE TYPE	EM-N48MJ430		EM-N48MJ435		EM-N48MJ440		EM-N48MJ445		EM-N48MJ450	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (P <sub>max</sub> )	430Wp	323Wp	435Wp	327Wp	440Wp	331Wp	445Wp	335Wp	450Wp	338Wp
Maximum Power Voltage (V <sub>mp</sub> )	29.36V	27.31V	29.54V	27.51V	29.72V	27.68V	29.9V	27.88V	30.08V	27.96V
Maximum Power Current (I <sub>mp</sub> )	14.65A	11.83A	14.73A	11.89A	14.81A	11.96A	14.89A	12.02A	14.97A	12.09A
Open-circuit Voltage (V <sub>oc</sub> )	34.31V	32.59V	34.49V	32.77V	34.67V	32.94V	34.85V	33.11V	35.03V	33.28V
Short-circuit Current (I <sub>sc</sub> )	15.85A	12.8A	15.9A	12.84A	15.95A	12.88A	16.0A	12.92A	16.05A	12.96A
Module Efficiency STC (%)	21.52%		21.77%		22.02%		22.27%		22.52%	
Operating temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	30A									
Power tolerance	0~+5W									
Temperature coefficients of P <sub>max</sub>	-0.29%/°C									
Temperature coefficients of V <sub>oc</sub>	-0.25%/°C									
Temperature coefficients of I <sub>sc</sub>	0.046%/°C									
Nominal operating cell temperature (NOCT)	44°C±2°C									

STC : Irradiance : 1000W/m<sup>2</sup> Cell Temperature : 25°C AM=1.5

NOCT : Irradiance : 800W/m<sup>2</sup> Ambient Temperature : 20°C AM=1.5 Wind Speed 1m/s