

EM-N48MBJ

420-440

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

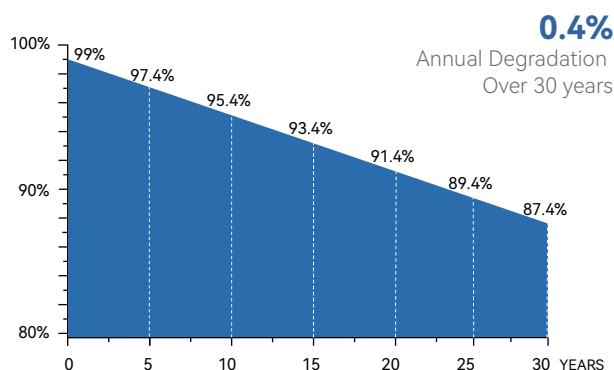
Lower LID / LETID attenuation with high reliable N-type module



Excellent temperature coefficient

Ensure high power generation in low temperature areas.

LINEAR PERFORMANCE WARRANTY

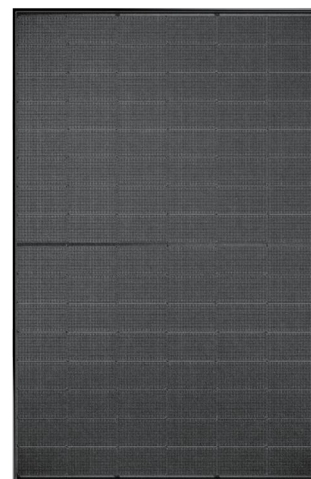


15
YEARS

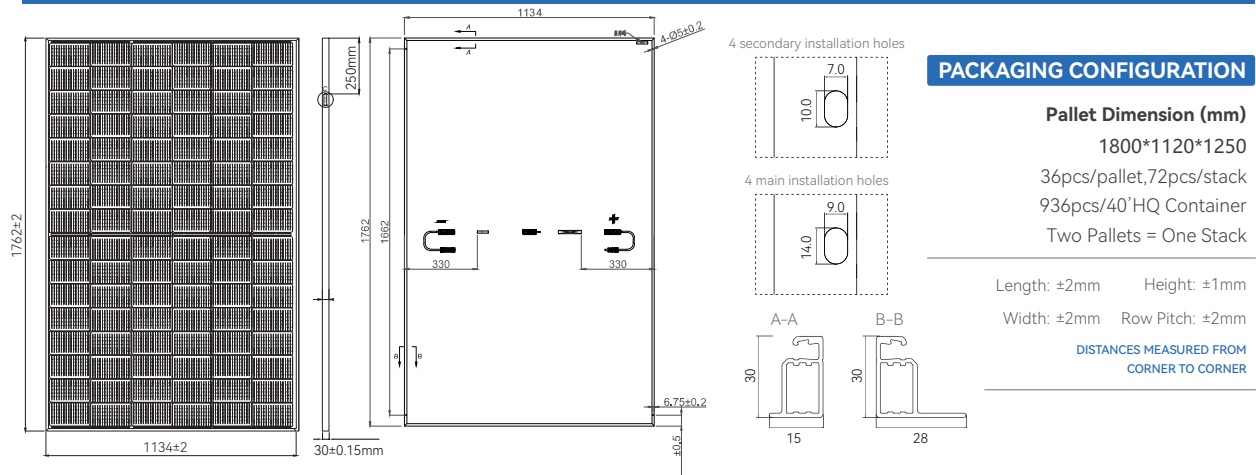
Year Product
Warranty

30
YEARS

Year Linear
Power Warranty



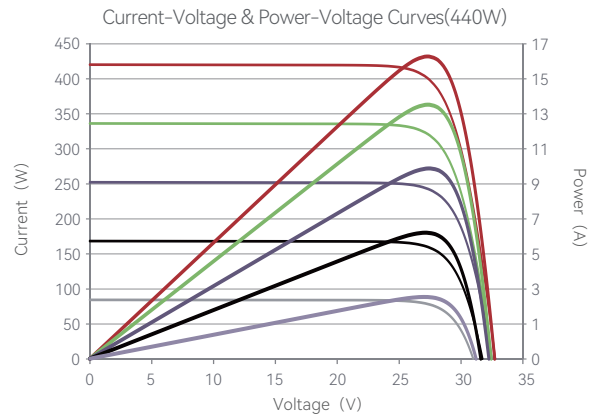
ASSEMBLY DRAWING



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	96 (6×16)
Dimensions	1762×1134×30mm
Weight	26.0±1kg
Front Glass	2.0mm, AG Patterned Heat-Strengthened Glass
Back Glass	2.0mm, Black Uranium-Doped Heat-Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TÜV 1×4.0mm ² (+): 300mm, (-): 200mm or Customized Length

Electrical Performance & Temperature Dependence



MODULE TYPE	EM-N48MBJ420		EM-N48MBJ425		EM-N48MBJ430		EM-N48MBJ435		EM-N48MBJ440	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	420Wp	316Wp	425Wp	320Wp	430Wp	323Wp	435Wp	327Wp	440Wp	331Wp
Maximum Power Voltage (Vmp)	29.28V	27.24V	29.33V	27.28V	29.38V	27.33V	29.43V	27.38V	29.48V	27.42V
Maximum Power Current (Imp)	14.34A	11.6A	14.50A	11.73A	14.64A	11.82A	14.78A	11.94A	14.93A	12.07A
Open-circuit Voltage (Voc)	34.05V	32.34V	34.11V	32.39V	34.17V	32.45V	34.23V	32.51V	34.29V	33.56V
Short-circuit Current (Isc)	14.96A	12.08A	15.12A	12.21A	15.27A	12.33A	15.42A	12.46A	15.57A	12.58A
Module Efficiency STC (%)	21.02%		21.27%		21.52%		21.77%		22.02%	
Operating temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	25/30A									
Power tolerance	0~+5W									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.045%/°C									
Nominal operating cell temperature (NOCT)	45°C±2°C									

STC : Irradiance : 1000W/m² Cell Temperature : 25°C AM=1.5NOCT : Irradiance : 800W/m² Ambient Temperature : 20°C AM=1.5 Wind Speed 1m/s