

EM-N60M 460-480

**BIFACIAL MODULE WITH
DUALGLASS**
N-TYPE

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

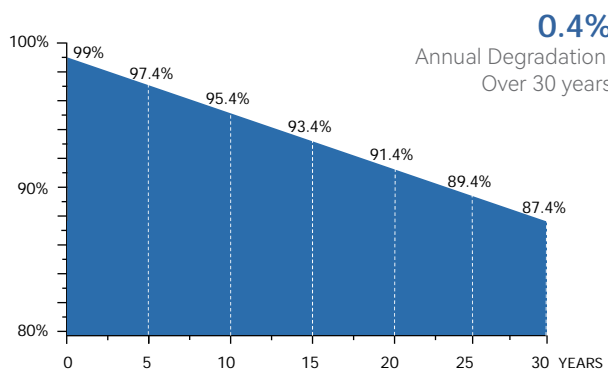
Lower LID / LETID attenuation with high reliable N-type module



Excellent temperature coefficient

Ensure high power generation in low temperature areas.

LINEAR PERFORMANCE WARRANTY



15
YEARS

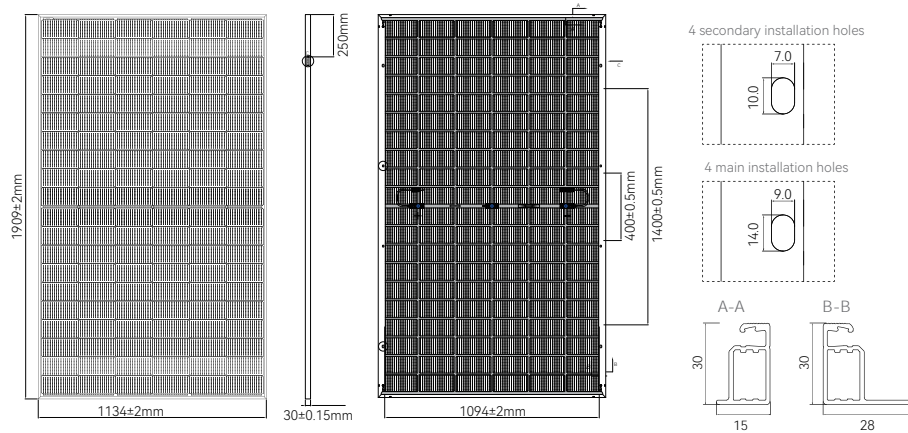
Year Product Warranty

30
YEARS

Year Linear Power Warranty



ASSEMBLY DRAWING



PACKAGING CONFIGURATION

Pallet Dimension (mm)

1931*1120*1249
36pcs/pallet, 72pcs/stack
864pcs/40'HQ Container
Two Pallets = One Stack

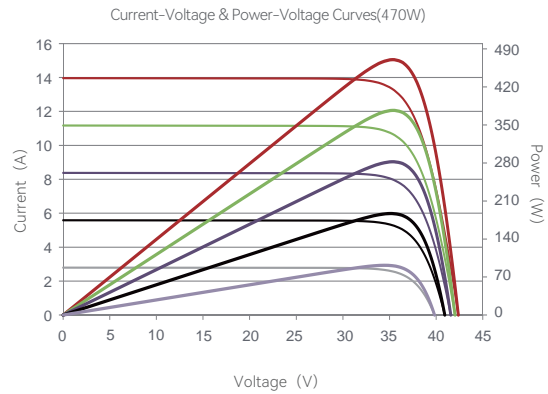
Length: ±2mm Height: ±1mm
Width: ±2mm Row Pitch: ±2mm

DISTANCES MEASURED FROM CORNER TO CORNER

Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	120 (6x20)
Dimensions	1909x1134x30mm
Weight	28.3kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 300mm, (-): 200mm or Customized Length

Electrical Performance & Temperature Dependence



MODULE TYPE	EM-N60M460		EM-N60M465		EM-N60M470		EM-N60M475		EM-N60M480	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	460Wp	348Wp	465Wp	352Wp	470Wp	356Wp	475Wp	359Wp	480Wp	363Wp
Maximum Power Voltage (Vmp)	34.6V	32.70V	34.8V	32.80V	35.0V	33.00V	35.3V	33.20V	35.5V	33.40V
Maximum Power Current (Imp)	13.30A	10.65A	13.37A	10.71A	13.43A	10.76A	13.49A	10.82A	13.56A	10.87A
Open-circuit Voltage (Voc)	42.0V	39.60V	42.2V	39.80V	42.4V	40.00V	42.6V	40.20V	42.8V	40.40V
Short-circuit Current (Isc)	13.99A	11.32A	14.07A	11.38A	14.15A	11.44A	14.24A	11.49A	14.31A	11.55A
Module Efficiency STC (%)	21.25%		21.48%		21.71%		21.94%		22.17%	
Operating temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+5W									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.046%/°C									
Nominal operating cell temperature (NOCT)	44°C±2°C									
Refer. Bifacial Factor	80±10%									

STC : Irradiance : 1000W/m² Cell Temperature : 25°C AM=1.5

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