

EM-N48MJ03 435-455

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



Module Characteristics Advanced Cell Technology

Multi-busbar N-type TOPCon cell technology Maximum power output up to 440W N-type modules exhibit lower LID/LETID degradation.



Strict Internal Quality Control, High Reliability

Optimized cell production technology and advanced encapsulation materials reduce PID degradation probability by 100% EL double inspection and rigorous internal quality control



Building Integration

Module weight: 6.7 kg/m², significantly reducing roof load pressure.



Excellent Low-Light Performance

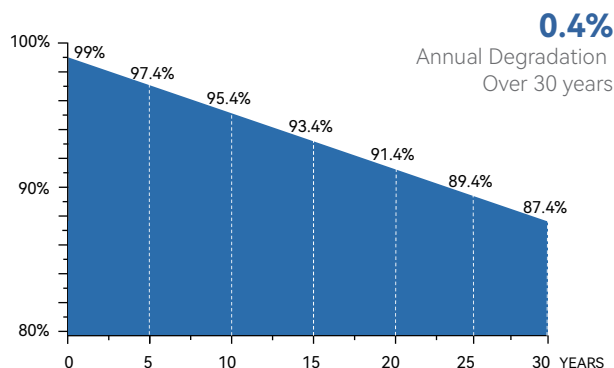
Superior power generation performance in low-light conditions, increasing energy yield.



Lightweight Design

Lightweight modules weigh only 2/3 of conventional double-glass modules, reducing manual handling costs.

LINEAR PERFORMANCE WARRANTY

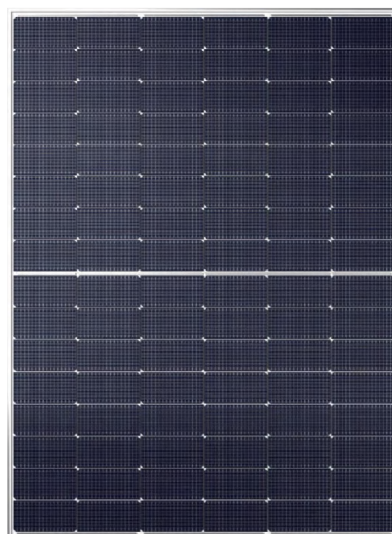


15
YEARS

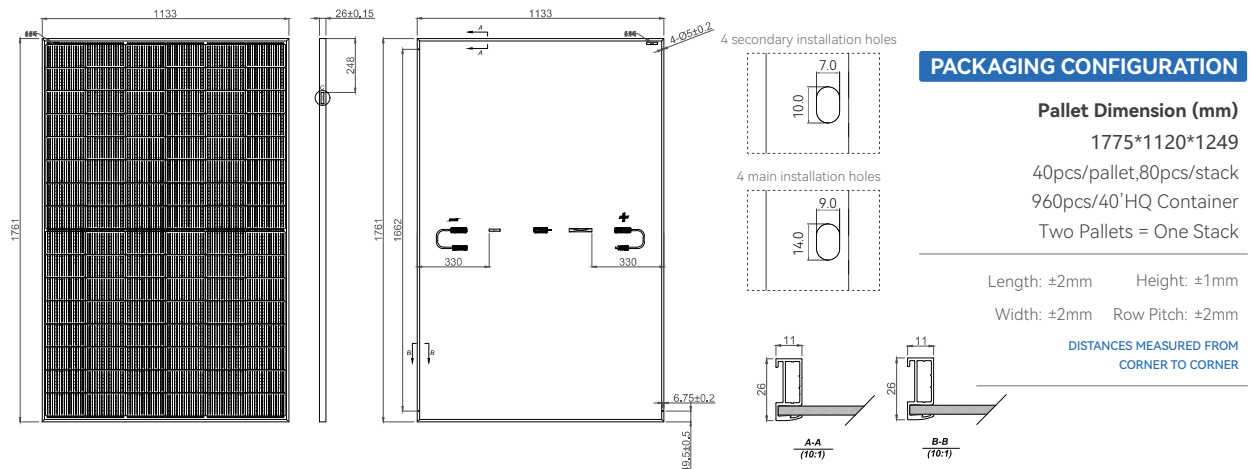
Year Product
Warranty

30
YEARS

Year Linear
Power Warranty



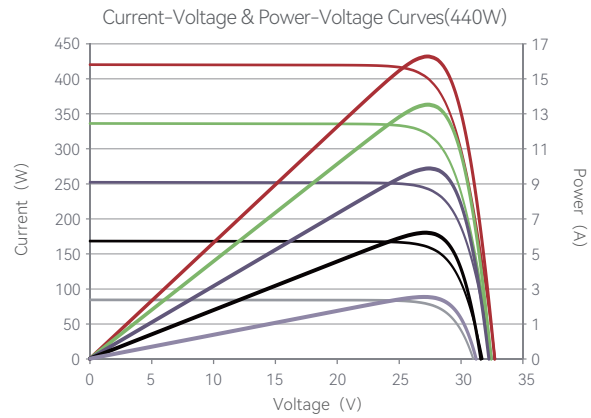
ASSEMBLY DRAWING



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	96 (6×16)
Dimensions	1761×1133×26mm
Weight	13.2kg
Front Glass	1.6mm, Anti-Reflection Coating
Back Glass	White back sheet
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-N48MJ01435		EM-N48MJ01440		EM-N48MJ01445		EM-N48MJ01450		EM-N48MJ01455	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	435Wp	330Wp	440Wp	333Wp	445Wp	337Wp	450Wp	341Wp	455Wp	345 Wp
Maximum Power Voltage (Vmp)	29.40V	28.0V	29.57V	28.2V	29.75V	28.3V	29.93V	28.5V	30.10V	28.7V
Maximum Power Current (Imp)	14.80A	11.84A	14.88A	11.90A	14.96A	11.97A	15.04A	12.03A	15.12A	12.10A
Open-circuit Voltage (Voc)	34.70V	32.7V	34.99V	33.3V	35.27V	33.3V	35.56V	33.5V	35.84V	33.8V
Short-circuit Current (Isc)	16.01A	12.91A	16.06A	12.99A	16.11A	12.99A	16.16A	13.03A	16.21A	13.07A
Module Efficiency STC (%)	21.77%		22.02%		22.27%		22.52%		22.77%	
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	0.045%/°C									
Nominal operating cell temperature (NOCT)	45°C±2°C									

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