



STxxxM10NHB-108

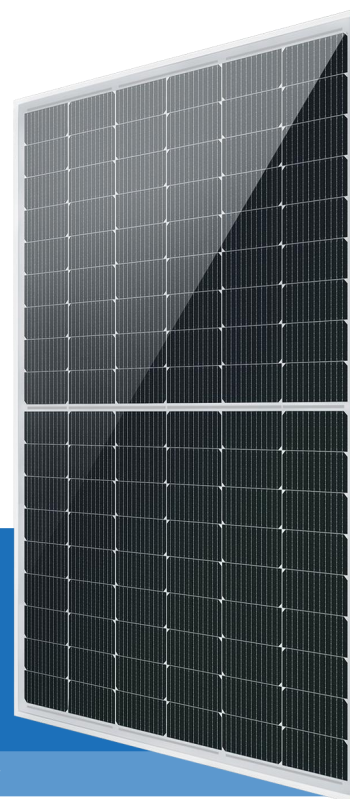
0~+5W

420~440W

TOPCon Mono-crystalline Bifacial Module

22.5%

High Module Conversion Efficiency



Key Features



Outstanding performance in weak-light conditions



Lower operating temperature



Half-cell and MBB design



Extended wind and snow load tests

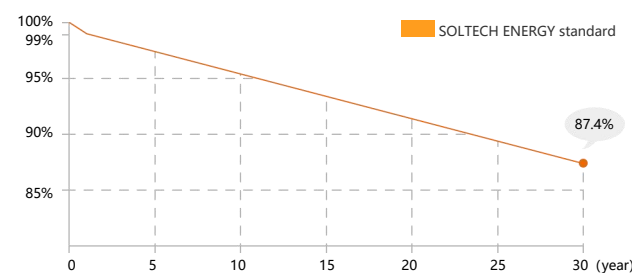


Withstanding harsh environment



Use scenario customization

Quality Certification



Materials and workmanship warranty



Linear performance warranty

First year power degradation < 1%
Annual degradation < 0.4%

Product Guarantee

ISO 9001:2015 Quality management systems
ISO 14001:2015 Environment management systems
ISO 45001:2018 Occupational health and safety management systems
IEC 61215/IEC 61730/IEC 61701/IEC 62716
TUV/CE/CQC/MCS/BIS/SASO/SGS/INMETRO



Electrical Characteristics

Module Type		ST420M10NHB-108		ST425M10NHB-108		ST430M10NHB-108		ST435M10NHB-108		ST440M10NHB-108	
Working Conditions		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC/NMOT(Pmax)	W	420	314.2	425	317.9	430	321.6	435	325.4	440	329.12
Optimum Operating Voltage(Vmp)	V	32.12	29.87	32.27	30.01	32.43	30.16	32.58	30.30	33.01	30.70
Optimum Operating Current (Imp)	A	13.07	10.52	13.17	10.59	13.26	10.66	13.32	10.74	13.33	10.72
Open Circuit Voltage(Voc)±3%	V	38.15	35.48	38.29	35.61	38.46	35.77	38.62	35.92	38.71	36.00
Short Circuit Current(Isc)±3%	A	13.61	11.21	13.72	11.30	13.82	11.38	13.88	11.47	14.13	11.57
Module Efficiency	%	21.5		21.8		22.0		22.3		22.5	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	25									
Operating Module Temperature	℃	-40~+85									

STC: Irradiance 1000W/m², cell temperature 25°C, atmospheric quality AM1.5
NMOT: Irradiance 800W/m², ambient temperature 20°C, AM1.5, wind speed 1m/s

Mechanical Characteristics

Solar Cell (No.of cells)	N-Mono 182x182 54 PCS
Dimensions	1722x1134x30 mm
Weight	22.8 kg(±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm ² /2x300mm or Customized length
Mechanical Load	5400Pa/2400Pa
Safety Rate	Class II (IEC)

Temperature Characteristics

Temperature Coefficient of Pmax	%/°C	-0.30
Temperature Coefficient of Voc	%/°C	-0.25
Temperature Coefficient of Isc	%/°C	+0.05
Nominal Module Operating Temperature	°C	45±2

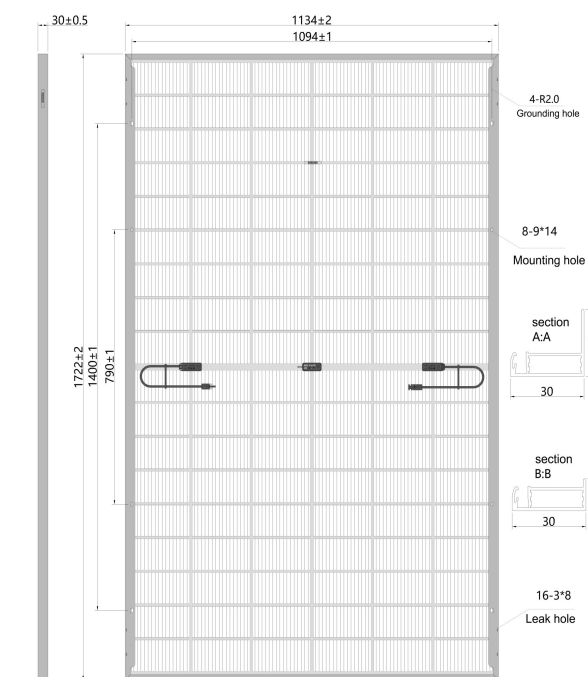
Different Backside Power Gain(435W)

Power Gain		5%	15%	25%
Maximum Power Pmp	W	456.8	500.3	543.8
Optimum Operating Voltage(Voc)	V	32.58	32.58	32.58
Optimum Operating Current(Imp)	A	14.02	15.35	16.69
Open Circuit Voltage (Voc)	V	38.62	38.62	38.62
Short Circuit Current(Imp)	A	14.97	16.40	17.82

Packing Configuration

Container 40'HQ	37PCS/pallet	26pallet/40'HQ	962PCS/40'HQ
17.5m Land Truck	37PCS/pallet	36pallet/truck	1332PCS/truck

Assembly Drawing (mm)



I-V Curves(435W)

