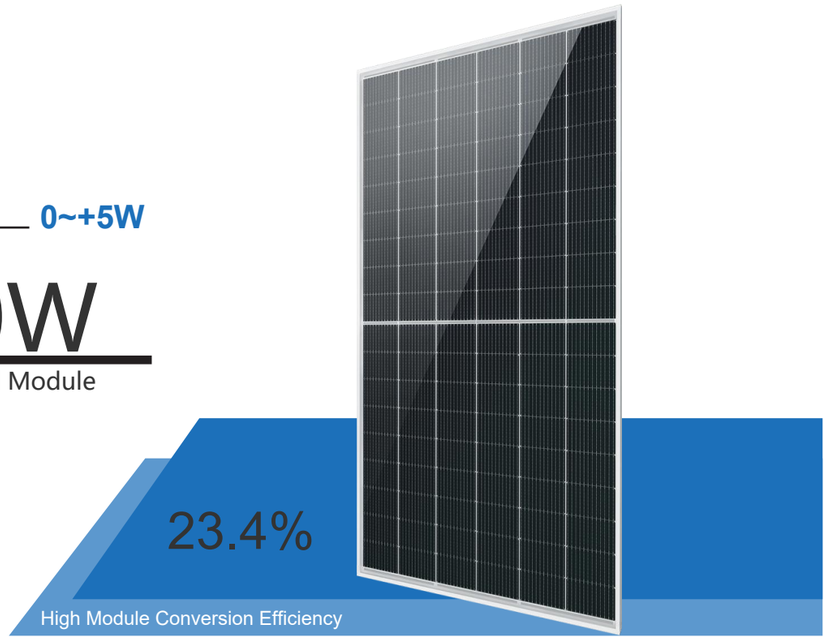
Soltech Energy

STxxxG12RNHB-108

0~+5W

500~520W

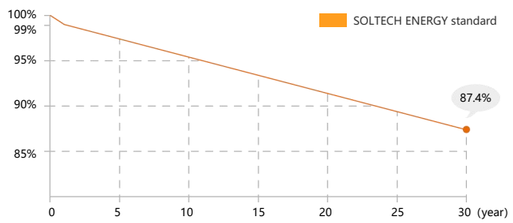
TOPCon Mono-crystalline Bifacial Module



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



12 years Materials and workmanship warranty

30 years 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		ST500G12RNHB-108		ST505G12RNHB-108		ST510G12RNHB-108		ST515G12RNHB-108		ST520G12RNHB-108	
Working Conditions		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC/NMOT(Pmax)	W	500	376.0	505	379.8	510	383.5	515	387.3	520	391.0
Optimum Operating Voltage(Vmp)	V	32.78	30.49	32.94	30.63	33.10	30.78	33.16	30.84	33.29	30.96
Optimum Operating Current (Imp)	A	15.25	12.33	15.33	12.40	15.41	12.46	15.53	12.56	15.62	12.63
Open Circuit Voltage(Voc)±3%	V	38.99	36.26	39.15	36.41	39.15	36.56	39.37	36.61	39.50	36.73
Short Circuit Current(Isc)±3%	A	16.19	13.09	16.27	13.15	16.34	13.21	16.45	13.30	16.53	13.37
Module Efficiency	%	22.5		22.7		22.9		23.2		23.4	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	25									
Operating Module Temperature	℃	-40~+85									

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

Mechanical Characteristics

Solar Cell (No.of cells)	N-Mono 182x210 54 PCS
Dimensions	1960x1134x30 mm
Weight	26.2 kg(±3%)
Glass	2.0+2.0mm Low-iron tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68 rated 3 bypass-diodes
Output Cables	4mm²/2x300mm or Customized length
Mechanical Load	5400Pa/2400Pa
Safety Rate	Class II (IEC)

Temperature Characteristics

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

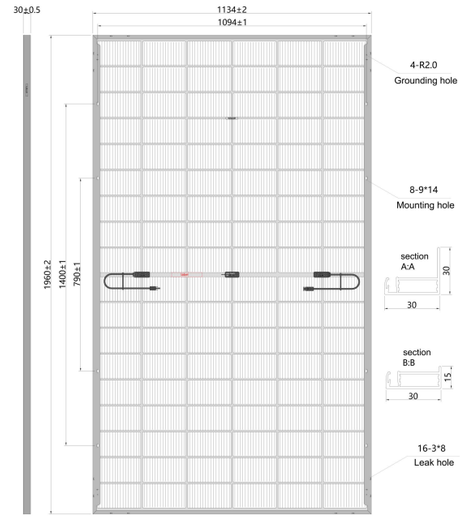
Different Backside Power Gain(500W)

Power Gain		5%	15%	25%
Maximum Power Pmp	W	525.0	575.0	625.0
Optimum Operating Voltage(Voc)	V	32.78	32.78	32.78
Optimum Operating Current(Imp)	A	16.02	17.54	19.07
Open Circuit Voltage (Voc)	V	38.99	38.99	38.99
Short Circuit Current(Imp)	A	17.04	18.67	20.29

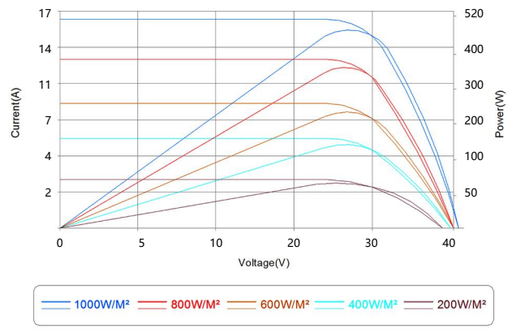
Packing Configuration

Container 40'HQ	37PCS/pallet	24pallet/40'HQ	888 PCS/40'HQ
17.5m Land Truck	37PCS/pallet	30pallet/truck	1110PCS/truck

Assembly Drawing (mm)



I-V Curves(500W)



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