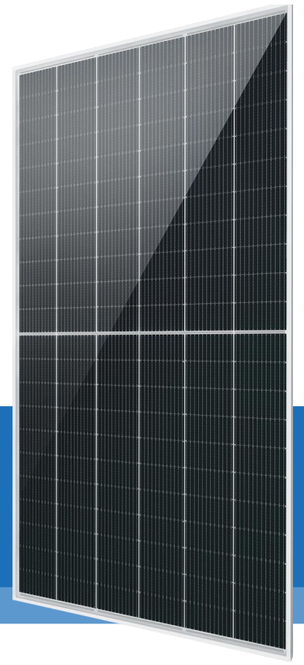
Soltech Energy

STxxxG12RNHB-132

0~+5W

610~630W

TOPCon Mono-crystalline Bifacial Module



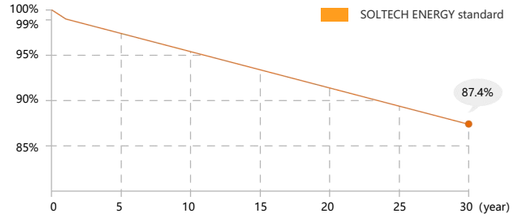
23.3%

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



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		ST610G12RNHB-132		ST615G12RNHB-132		ST620G1R2NHB-132		ST625G12RNHB-132		ST630G12RNHB-132	
Working Conditions		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power at STC/NMOT(Pmax)	W	610	458.7	615	462.5	620	466.2	625	470.0	630	473.8
Optimum Operating Voltage(Vmp)	V	40.00	37.20	40.19	37.38	40.39	37.56	40.46	37.63	40.52	37.68
Optimum Operating Current (Imp)	A	15.25	12.33	15.30	12.37	15.35	12.41	15.45	12.49	15.55	12.57
Open Circuit Voltage(Voc)±3%	V	47.59	44.26	47.78	44.44	47.98	44.62	48.05	44.69	48.11	44.74
Short Circuit Current(Isc)±3%	A	16.20	13.10	16.25	13.14	16.30	13.18	16.38	13.25	16.47	13.32
Module Efficiency	%	22.6		22.7		22.9		23.1		23.3	
Maximum System Voltage	V	1500 (DC)									
Maximum Series Fuse Rating	A	30									
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 66 PCS
Dimensions	2382x1134x30 mm
Weight	32.0kg(±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

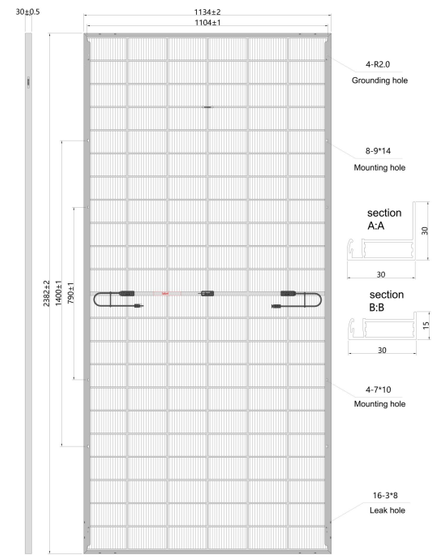
Different Backside Power Gain(630W)

Power Gain		5%	15%	25%
Maximum Power Pmp	W	661.5	724.5	787.5
Optimum Operating Voltage(Voc)	V	40.52	40.52	40.52
Optimum Operating Current(Imp)	A	16.33	17.88	19.43
Open Circuit Voltage (Voc)	V	48.11	48.11	48.11
Short Circuit Current(Imp)	A	17.40	19.06	20.72

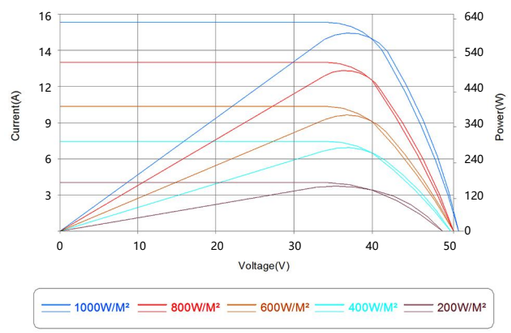
Packing Configuration

Container 40'HQ	37PCS/pallet	20pallet/40'HQ	740PCS/40'HQ
17.5m Land Truck	37PCS/pallet	26pallet/truck	962PCS/truck

Assembly Drawing (mm)



I-V Curves(630W)



Soltech Energy SRL
Via Platone 5, 41012 Carpi (MO)

info@soltech-energy.eu

www.soltech-energy.eu

The Electrical performance parameters are neither just referred to one panel, nor are a part of the contract; They are only used as reference Product specifications are subject to change without notice, all technical changes Zhongyi New Energy reserves the right of final interpretation.