

BOLTRONZ

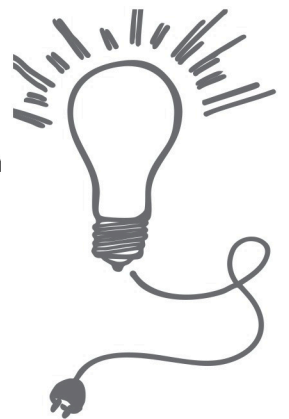
SOLAR PANEL SERIES

PRODUCT DESCRIPTION

Boltronz Solar Panel is a high-efficiency N-Type bifacial half-cell solar module designed for maximum power output, low degradation, and long-term reliability. With advanced multi-busbar technology and a 30-year linear performance warranty, it delivers superior energy generation even in high-temperature conditions.

PRODUCT FEATURES

- **Multi-busbar Technology**
Better light trapping and current collection, improving power output and reliability.
- **Low Degradation**
Lower power degradation, better LID/LeTID performance, and higher reliability.
- **Bifacial Power Generation**
Bifacial design enables higher power generation by capturing reflected light on the rear side.
- **Excellent Temperature Coefficient**
Ensures higher power output even in high temperature environments.
- **PID Resistant**
Excellent anti-PID performance ensures minimal power degradation under harsh conditions.



RANGE BSP 570-590



ELECTRICAL SPECIFICATIONS

Module Type	BSP 570		BSP 575		BSP 580		BSP 585		BSP 590	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	570Wp	429Wp	575Wp	432Wp	580Wp	435Wp	585Wp	439Wp	590Wp	443Wp
Maximum Power Voltage (Vmp)	43.10V	41.0V	43.30V	41.2V	43.50V	41.4V	43.70V	41.6V	43.90V	41.8V
Maximum Power Current (Imp)	13.24A	10.54A	13.28A	10.63A	13.34A	10.63A	13.38A	10.74A	13.44A	10.74A
Open Circuit Voltage (Voc)	51.8V	48.6V	52.0V	48.7V	52.2V	49.0V	52.4V	49.0V	52.6V	49.0V
Short Circuit Current (Isc)	14.01A	11.33A	14.08A	11.35A	14.15A	11.41A	14.22A	11.47A	14.29A	11.52A
Module Efficiency (%)	22.07%		22.26%		22.45%		22.65%		22.84%	
Operating Temperature (°C)	-40°C ~ +85°C									
Maximum System Voltage	1500V DC (IEC)									
Maximum Series Fuse Rating	25A									
Power Output Tolerance	0 ~ +5W									
Temperature Coefficient of Pmax	-0.29%/°C									
Temperature Coefficient of Voc	-0.25%/°C									
Temperature Coefficient of Isc	0.045%/°C									
Nominal Operating Cell Temperature (NOCT)	45±2°C									
Bifaciality	80%±10%									

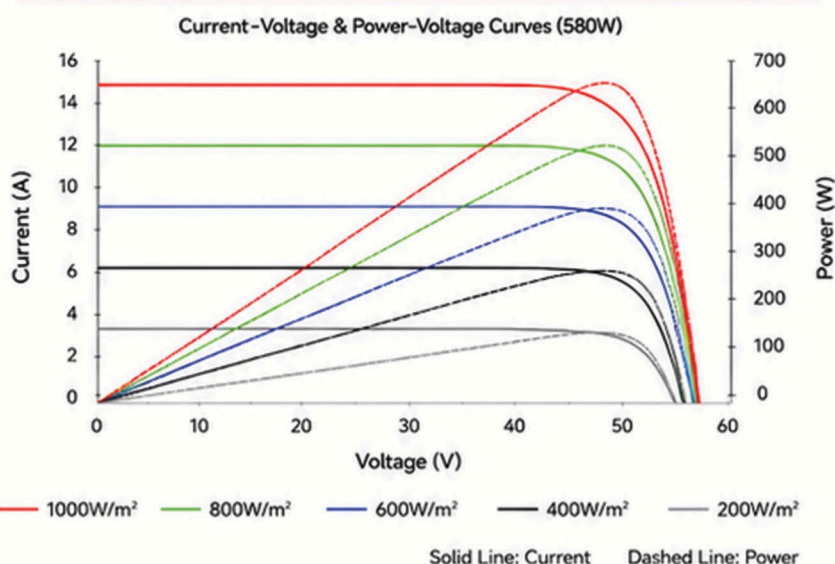
STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

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

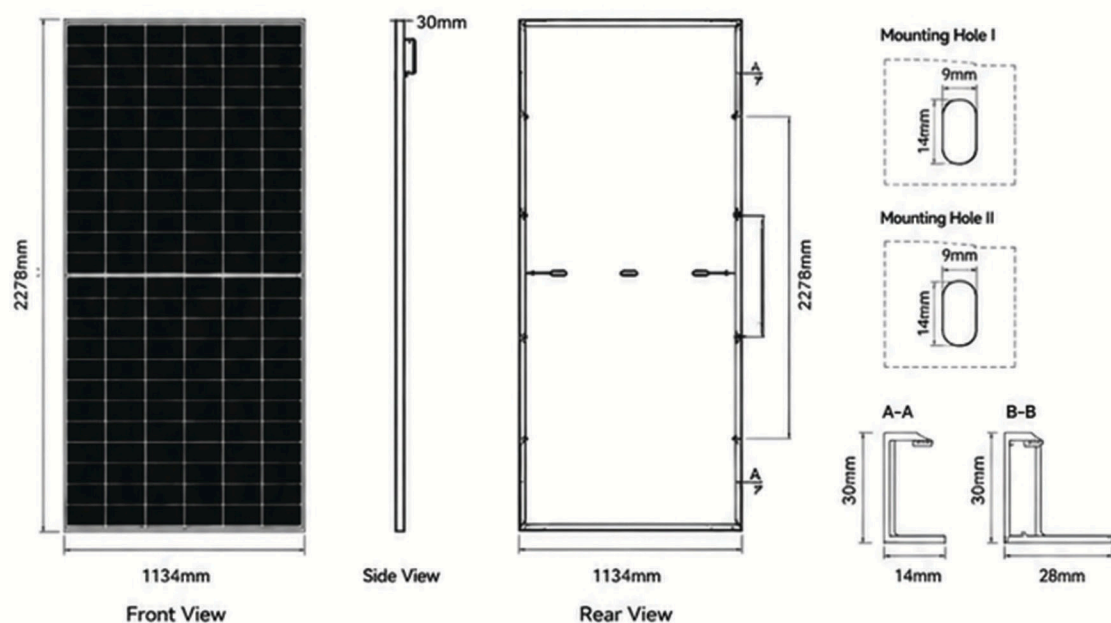
MECHANICAL SPECIFICATIONS

Cell Type	N-type Bifacial Monocrystalline Cell
Number of Cells	144 (6×24)
Dimensions	2278 × 1134 × 30 mm
Weight	32.3 kg
Front Glass	2.0 mm, High Transmission Coated Glass
Rear Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable	4 mm ² (IEC)
Connector	TÜV 14.0mm ²
Cable Length: (+) 300mm / (-) 300mm, or Customized	

I-V CURVES



DIMENSIONS



WEIGHT

Flat Installation Weight
32.3 kg

PACKAGING CONFIGURATION

Number of Modules per Box
36 pcs / box

Box Dimensions (L x W x H)
2300 × 1130 × 1240 mm

Weight per Box
864 kg ± 3%

PERFORMANCE TOLERANCE

Length: ±2mm
Width: ±2mm
Thickness: ±1mm
Hole Pitch: ±2mm
Hole Diameter: ±2mm

BOLTRONZ

SOLAR PANEL SERIES

PRODUCT DESCRIPTION

Boltronz Solar Panel 610–630W is a high-efficiency N-Type bifacial dual-glass solar module designed for superior power generation and long-term reliability. Featuring SMBB technology, low attenuation, and excellent temperature performance, it delivers enhanced energy output with 0~+5W positive power tolerance and up to 30 years linear power warranty.

PRODUCT FEATURES

- SMBB technology
Better current collection to improve module power output and reliability.
- Low attenuation technology
Lower LID / LeTID attenuation with high reliable N-type module.
- Bifacial power generation
Power generation can reach up to 25% maximum, significantly improving power generation gain and reducing LCOE.
- Excellent temperature coefficient
Ensure high power generation in low temperature areas.
- Anti-PID technology
Excellent Anti-PID performance via highly reliable cell and material technology.



RANGE BSP 610–630



Module Type	BSP 610		BSP 615		BSP 620		BSP 625		BSP 630	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	610Wp	462Wp	615Wp	466Wp	620Wp	470Wp	625Wp	474Wp	630Wp	477Wp
Maximum Power Voltage (Vmp)	40.80V	38.9V	41.10V	39.1V	41.40V	39.4V	41.70V	39.6V	42.0V	39.8V
Maximum Power Current (Imp)	14.96A	11.97A	14.98A	11.98A	14.99A	11.99A	15.0A	12.0A	15.01A	12.01A
Open-circuit Voltage (Voc)	49.00V	46.2V	49.30V	46.5V	49.60V	46.8 V	49.90V	47.1V	50.20V	47.4 V
Short-circuit Current (Isc)	15.86A	12.79A	15.89A	12.81A	15.91A	12.83A	15.93A	12.85A	15.95A	12.87A
Module Efficiency STC (%)	22.19%		22.38%		22.56%		22.75%		22.93%	
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									

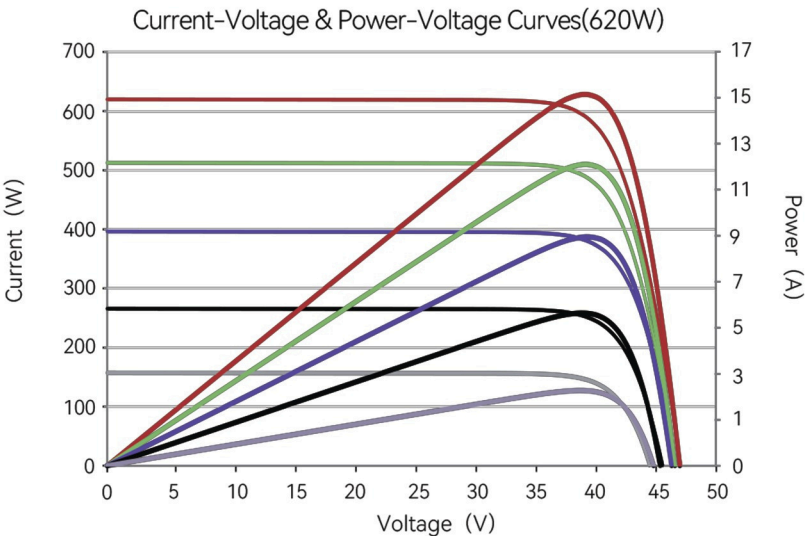
STC : Irradiance : 1000W/m² Cell Temperature : 25°C AM=1.5

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

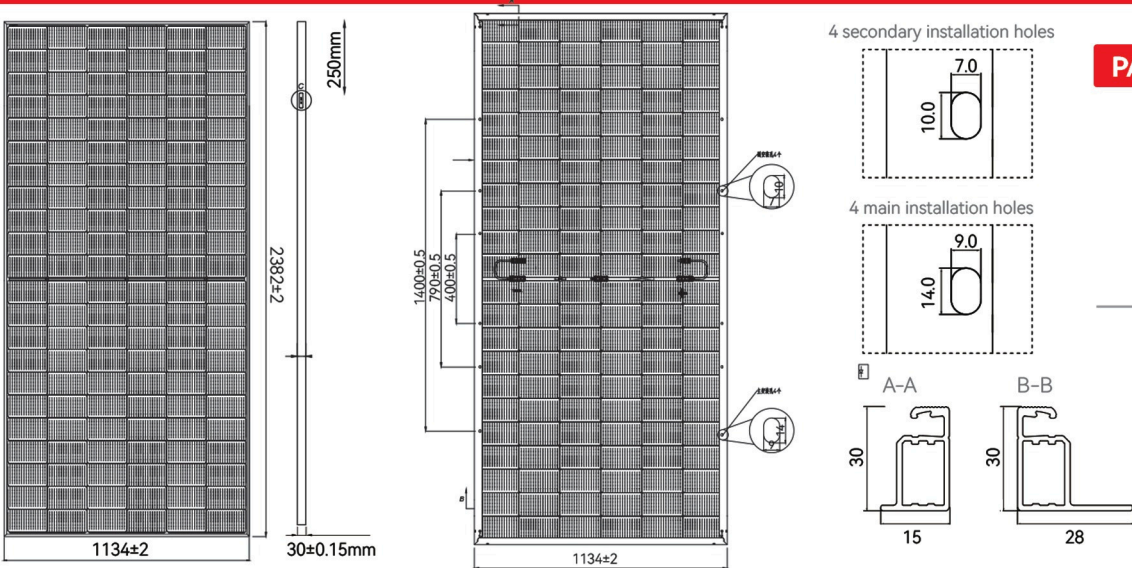
Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	132 (6×22)
Dimensions	2382×1134×30mm
Weight	33kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Semi-tempered glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TÜV 1×4.0mm ² (+): 300mm , (-): 200mm or Customized Length

Electrical Performance & Temperature Dependence



ASSEMBLY DRAWING



PACKAGING CONFIGURATION

Pallet Dimension (mm)

2395*1120*1249

36pcs/pallet,72pcs/stack

720pcs/40' HQ Container

Two Pallets = One Stack

Length: ±2mm Height: ±1mm

Width: ±2mm Row Pitch: ±2mm

DISTANCES MEASURED FROM
CORNER TO CORNER

BOLTRONZ

SOLAR PANEL SERIES

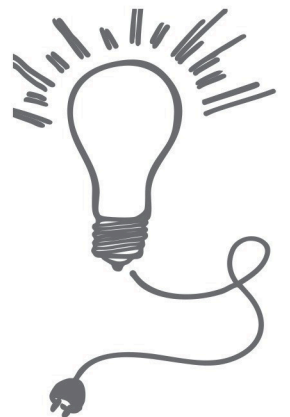
PRODUCT DESCRIPTION

Boltronz Solar Panel 700-720W is a high-efficiency N-Type bifacial solar module built for maximum power output and durability.

With advanced SMBB technology and low attenuation, it delivers reliable performance for commercial and industrial solar projects.

PRODUCT FEATURES

- SMBB technology
Better current collection to improve module power output and reliability.
- Low attenuation technology
Lower LID / LETID attenuation with high reliable N-type module.
- Bifacial power generation
Power generation can reach up to 25% maximum, significantly improving power generation gain and reducing LCOE.
- Excellent temperature coefficient
Ensure high power generation in low temperature areas.
- Anti-PID technology
Excellent Anti-PID performance via highly reliable cell and material technology.



RANGE BSP 700-720



Module Type	BSP 700		BSP 705		BSP 710		BSP 715		BSP 720	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	700Wp	530Wp	705Wp	534Wp	710Wp	538Wp	715Wp	542Wp	720Wp	545 Wp
Maximum Power Voltage (Vmp)	40.43V	38.1V	40.43V	38.1V	40.43V	38.1V	40.43V	38.1V	40.43V	38.1V
Maximum Power Current (Imp)	17.31A	13.96A	17.44A	14.06A	17.56A	14.16A	17.68A	14.26A	17.81A	14.36A
Open-circuit Voltage (Voc)	47.94V	45.7V	48.08V	45.8V	48.22V	45.9V	48.36V	46.1V	48.50V	46.2V
Short-circuit Current (Isc)	18.25A	14.60A	18.28A	14.62A	18.31A	14.65A	18.34A	14.67A	18.37A	14.70A
Module Efficiency STC (%)	24.73%		24.91%		25.09%		25.26%		25.44%	
Operating temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	30A									
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									

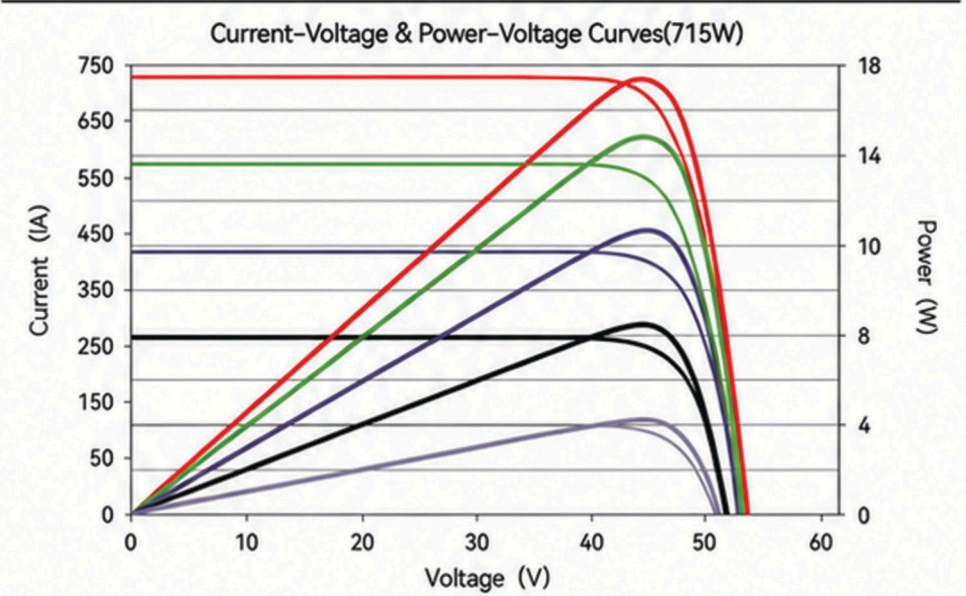
STC : Irradiance : 1000W/m² Cell Temperature : 25°C AM=1.5

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

Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	132 (6×22)
Dimensions	2384×1303×33mm
Weight	38.3kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Semi-tempered glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TÜV 1×4.0mm2 (+) 300mm , (-) 200mm or Customized Length

Electrical Performance & Temperature Dependence



ASSEMBLY DRAWING

