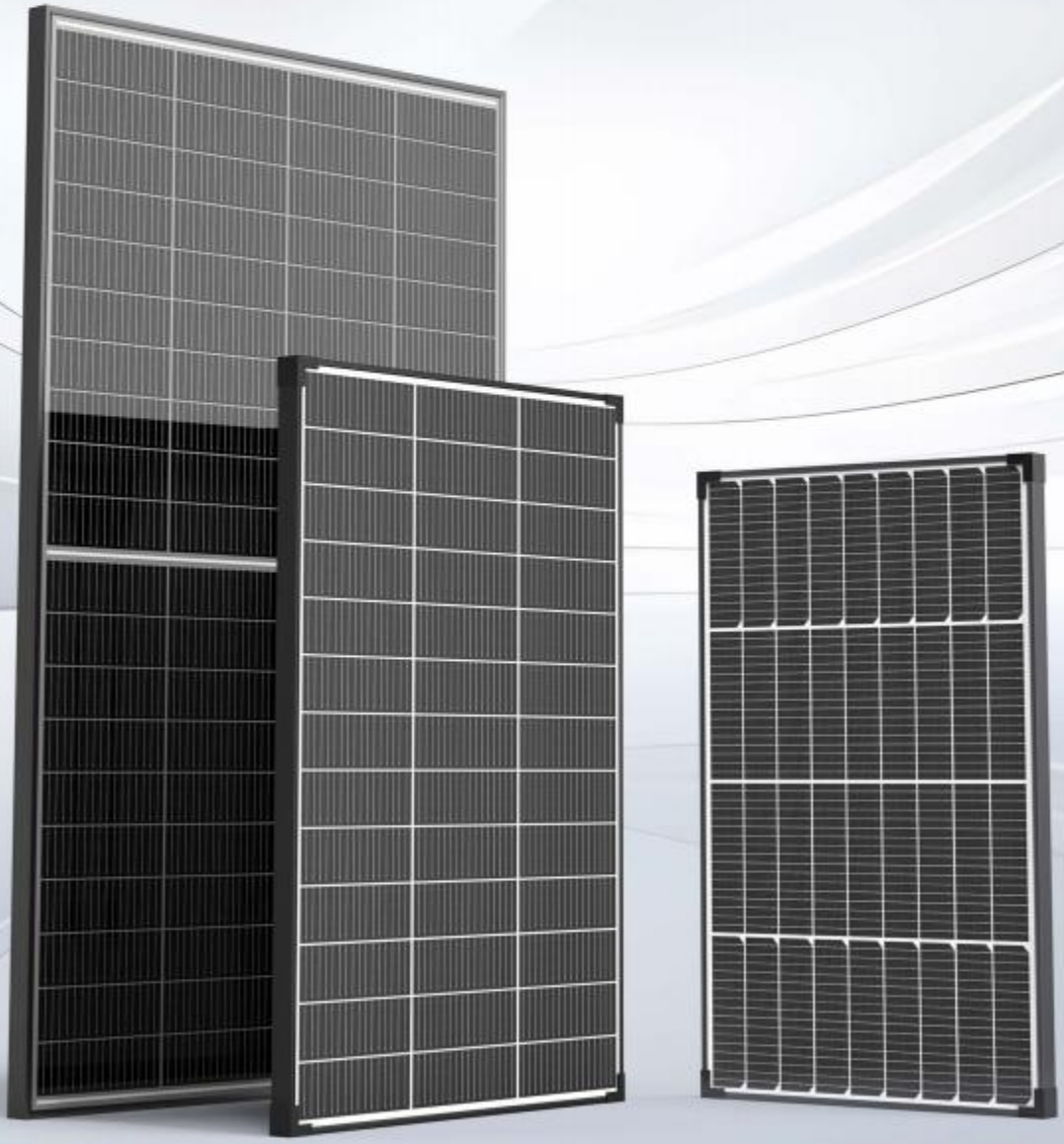
Rigid
Soalr Panel Series



50W~200W

The Rigid Solar Panel Series offers high conversion efficiency, low degradation, and high reliability, making it ideal for RVs, camping, boats, rooftops, and more, ensuring a stable power supply.

Features

- N-Type cells with up to 25% efficiency.
- 16BB design for superior low-light performance and long lifespan.
- Design Durable with 3.2mm tempered glass and anodized aluminum alloy frame.
- Supports wind/snow loads up to 2400Pa/5400Pa for harsh conditions.
- IP68 rating for excellent water and dust resistance.
- Maintaining 84.5% output after 25 years.
- Enhanced Performance in High Temperatures
- Compact Size & Easy Installation,suitable for rv/marine/rooftop.

Electrical Specifications

Model	OB-TC50W	OB-TC100W	OB-PR100W
Maximum Power at STC (Pmax)	50W	100W	100W
Maximum Power Voltage (Vmp)	20.16V	23.1V	18.55V
Maximum Power Current (Imp)	2.51A	4.33A	5.41A
Open-circuit Voltage (Voc)	23.51V	26.94V	21.95V
Short-circuit Current (Isc)	2.64A	4.51A	5.68A
Operating Temperature Range	-40°C ~ 85°C		
Maximum System Voltage	1000V DC		
Maximum Series Fuse Rating	10A	15A	15A
Max. Wind Load/Snow Load	2400Pa/5400Pa		

*STC(Standard Test Condition): Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5.

Mechanical Parameters

Model	OB-TC50W	OB-TC100W	OB-PR100W
Cell Type	N-Type 16BB 182mm Monocrystalline Silicon		Monocrystalline Silicon, PERC 10BB 182
Cell Efficiency	25%		23.5%
Glass	3.2mm Tempered Glass		2.0mm Tempered Glass
Frame	Anodized Aluminium Alloy		
IP Rating	IP68		
Connector	Solar Connector		
Dimensions (±2mm)	764 × 468 × 30	853 × 578 × 30	576 × 1070 × 30
Weight (kg)	4.0	5.3	4.8

Temperature Characteristics

Model	OB-TC50W	OB-TC100W	OB-PR100W
Temperature Coefficients of Pmax	-0.29%/K		
Temperature Coefficients of Voc	-0.25%/K		
Temperature Coefficients of Isc	0.045%/K		
NMOT	42°C ± 2°C		

The Rigid Bifacial Solar Panel Series offers high conversion efficiency, low degradation, and high reliability, making it ideal for RVs, camping, boats, rooftops, and more, ensuring a stable power supply. It captures energy from both the front and back, utilizing direct, reflected, and diffused sunlight. Compared with traditional panels, its dual-sided design boosts power output by up to 30%.

Features

- N-Type cells with up to 25% efficiency.
- 16BB design for superior low-light performance and long lifespan.
- Featuring a transparent backsheet, the bifacial design increases solar output by 30%.
- Design Durable with 3.2mm tempered glass and anodized aluminum alloy frame.
- Supports wind/snow loads up to 2400Pa/5400Pa for harsh conditions.
- IP68 rating for excellent water and dust resistance.
- Maintaining 84.5% output after 25 years.
- Compact Size & Easy Installation,suitable for rv/marine/rooftop.

Electrical Specifications

Model	OB-TC200W
Maximum Power at STC (Pmax)	200W
Maximum Power Voltage (Vmp)	23.74V
Maximum Power Current (Imp)	8.43A
Open-circuit Voltage (Voc)	27.31V
Short-circuit Current (Isc)	8.91A
Operating Temperature Range	-40°C ~ 85°C
Maximum System Voltage	1000V DC
Maximum Series Fuse Rating	25A
Max. Wind Load/Snow Load	2400Pa/5400Pa

*STC(Standard Test Condition): Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5.

Mechanical Parameters

Model	OB-TC200W
Cell Type	Monocrystalline Silicon, TOPCon
Cell Arrangement	80pcs (4 × 10) × 2
Cell Efficiency	25%
Glass	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
IP Rating	IP68
Connector	Compatible with MC-4
Included Components	solar panel
Dimensions (mm)	1304 × 770 × 35
Weight (kg)	10.8

Temperature Characteristics

Model	OB-TC200W
Temperature Coefficients of Pmax	-0.30%/K
Temperature Coefficients of Voc	-0.25%/K
Temperature Coefficients of Isc	0.045%/K