

## SOLAR PV MODULE

# 132 HALF CUT TOPCon CELL

BIFACIAL DUAL GLASS G12R 600-630W  
WITH NEW 210.0X182.3mm CELL

### Suitable for



**RESIDENTIAL**



**UTILITY**



**COMMERCIAL**



**OFF-GRID**

## Transition to a Brighter Tomorrow



### SMBB TECHNOLOGY

Better light trapping and current collection to improve module power output and reliability



### PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control



### Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR



### Auto Bussing & Soldering Technology

Induction based Improved soldering quality without pollution to module



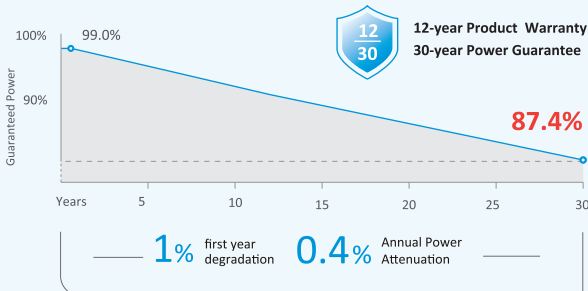
### Enhanced Mechanical Load

Certified to withstand wind load (2400 Pascal) and snow load (5400 Pascal)



### Positive power tolerance (0 to +5w)

## Performance Warranty



\* Please refer to product warranty for details

## Certification



IEC 62804 (PID) | IEC 61701 (Salt Mist) | IEC 62726 (Ammonia)

IEC 61853- 2 (Panfile & IAM) | LID, LETID | UL 61730

IEC 60068 (Sand & Dust) | IEC 61215 | IEC 61730

**G12R (210.0x182.3mm) WAFER, IDEAL FOR ULTRA-LARGE POWER PLANT**

**AVAILABLE IN ALL BLACK RANGE**



# Electrical Characteristics (STC)



MODULE TYPE	PE-132-600 THGB-G12R	PE-132-605 THGB-G12R	PE-132-610 THGB-G12R	PE-132-615 THGB-G12R	PE-132-620 THGB-G12R	PE-132-625 THGB-G12R	PE-132-630 THGB-G12R
Maximum Power, W (Pmp) <sup>1</sup>	600	605	610	615	620	625	630
Open Circuit Voltage, V (Voc) <sup>1</sup>	48.79	48.93	49.06	49.20	49.34	49.47	49.61
Short Circuit Current, A (Isc) <sup>1</sup>	15.60	15.61	15.62	15.62	15.63	15.64	15.65
Maximum Power Voltage, V (Vmp) <sup>1</sup>	41.03	41.21	41.39	41.57	41.76	41.94	42.13
Maximum Power Current, A (Imp) <sup>1</sup>	14.63	14.68	14.74	14.79	14.85	14.90	14.96
Module Fill Factor, % (FF) <sup>1</sup>	78.8	79.2	79.6	80.0	80.4	80.8	81.2
Module Efficiency, % (Eff)	22.21	22.40	22.58	22.76	22.95	23.13	23.32
Temperature Coefficients of Pmax <sup>2</sup>	-0.29%/°C						
Temperature Coefficients of Voc <sup>2</sup>	-0.25%/°C						
Temperature Coefficients of Isc <sup>2</sup>	+0.045%/°C						

STC Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, AM1.5G <sup>1</sup>Measurement Uncertainty: ±3%

<sup>2</sup>Due to different testing methods, the actual performances might marginally differ from the declared specifications.

## Temperature Characteristics

Operating Temperature	-40 °C ~ +85 °C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30 A
Nominal Operating Cell Temperature - NOCT	45±2 °C
Bifaciality factor	80±5 %

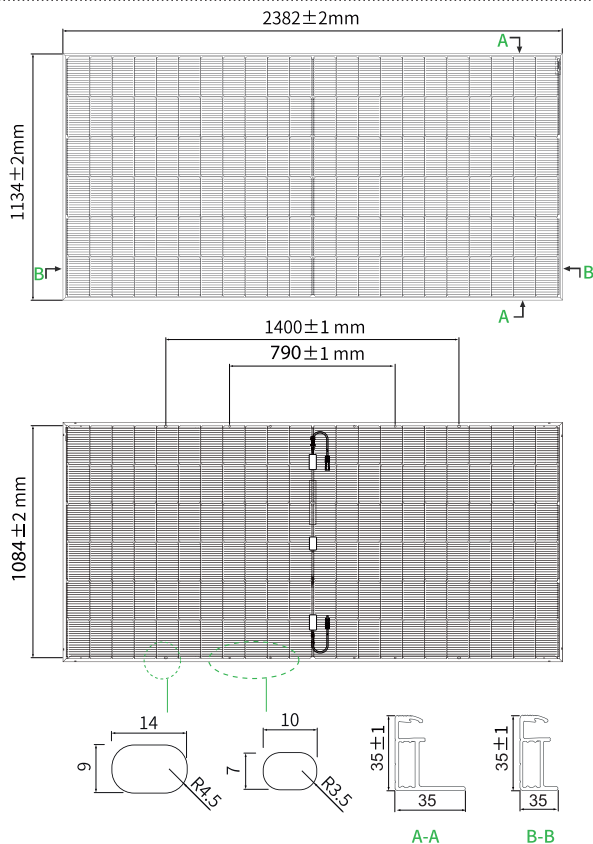
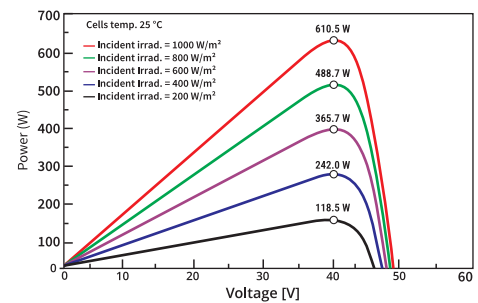
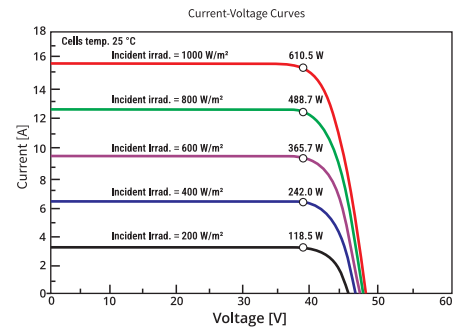
# Electrical Characteristics (NOCT)

MODULE TYPE	PE-132-600 THGB-G12R	PE-132-605 THGB-G12R	PE-132-610 THGB-G12R	PE-132-615 THGB-G12R	PE-132-620 THGB-G12R	PE-132-625 THGB-G12R	PE-132-630 THGB-G12R
Maximum Power, W (Pmp)	452.8	456.5	460.3	464.0	467.8	471.6	475.4
Open Circuit Voltage, V (Voc)	45.89	46.02	46.14	46.27	46.40	46.53	46.66
Short Circuit Current, A (Isc)	12.60	12.60	12.61	12.61	12.62	12.62	12.63
Maximum Power Voltage, V (Vmp)	38.58	38.76	38.93	39.10	39.27	39.45	39.62
Maximum Power Current, A (Imp)	11.81	11.85	11.90	11.94	11.99	12.03	12.07
Module Fill Factor, % (FF)	78.3	78.7	79.1	79.5	79.9	80.3	80.7
Module Efficiency, % (Eff)	16.76	16.90	17.04	17.17	17.31	17.45	17.59

NOCT- Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20°C AM1.5G, Wind speed 1m/s Measurement Uncertainty: ±3%

Bifacial Gain		PE-132-600 THGB-G12R	PE-132-605 THGB-G12R	PE-132-610 THGB-G12R	PE-132-615 THGB-G12R	PE-132-620 THGB-G12R	PE-132-625 THGB-G12R	PE-132-630 THGB-G12R
10%	Power Pmp,W	660	665	671	676	682	688	693
20%	Power Pmp,W	720	726	732	738	744	750	756
30%	Power Pmp,W	780	786	793	800	806	812	819

Bifacial gains depends on the power plant design & albedo of installation site Measurement Uncertainty: ±3%



## Mechanical Specifications

Cell Type	N-TYPE, 16BB
No. of Cells	132 (66X2), (105x182.3±1mm)
Dimensions	2382 X 1134 X 35mm
Weight	33.5 kg ±3%
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Protection Class	Class II
Fire Performance	Class C
Output Cables	4.0 mm <sup>2</sup> /400mm Length

Module frame available in 30x30mm (Long) & 30x15mm (Short)

## Packing Configuration

Container	32'HQ	40'HQ
Pieces per Pallet	31	31
Pallets per Container	15	20
Pieces per Container	465	620



FIRST YEAR  
DEGRADATION < 1.0%

YEAR 2-30 POWER  
DEGRADATION < 0.40%

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