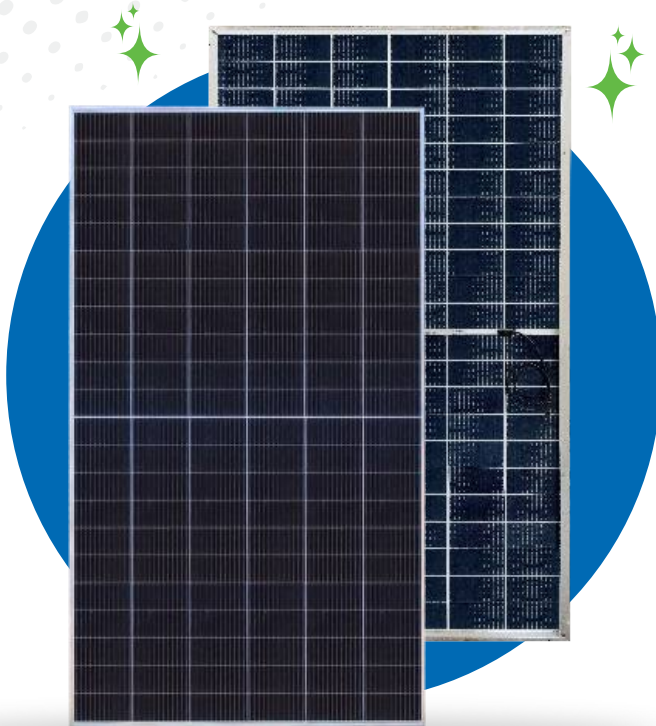




# SOLAR PV MODULE (NON-DCR) 132 HALF CUT MONO PERC CELL 640-670 W BIFACIAL DUAL GLASS



## TRANSITION TO A BRIGHTER TOMORROW

- Based on G12-210mm wafer, best choice for ultra-large power plant
- Advanced module technology delivers superior module efficiency
  - G12 Gallium-Doped Wafer
  - Smart Soldering
  - 12 Busbar Half-Cut Cells
- ARC Coated, High Transmission Glass for Higher Energy Yield
- High Module Quality Ensures Long-Term Reliability

## HIGH PERFORMANCE GUARANTEE!

**30** YEARS WARRANTY FOR LINEAR POWER OUTPUT

**12** YEARS PRODUCT WARRANTY



### 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)

## IDEAL FOR



Residential



Commercial



Utility



Off-grid

## CERTIFICATION

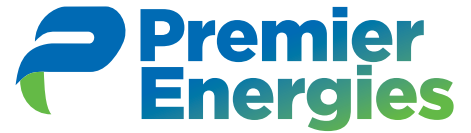
IEC 62804 (PID) | IEC 61701 (Salt Mist) | IEC 61726 (Ammonia) | IEC 62782 (DMLT)

IEC 61853-1 & 2 (Panfile & IAM) | LID, LETID | IEC 60068 (Sand & Dust) | IEC 61215

IEC 62759 (Transportation) | CEC, INMETRO, CE | IEC 61730 | UL 61730



# SOLAR PV MODULE (NON-DCR) 132 HALF CUT MONO PERC CELL



## BIFACIAL DUAL GLASS 640-670 W

MODULE TYPE	PE 640G12HGB	PE 645G12HGB	PE 650G12HGB	PE 655G12HGB	PE 660G12HGB	PE 665G12HGB	PE 670G12HGB
Maximum Power (Pmp)	640	645	650	655	660	665	670
Open Circuit Voltage (Voc)	45.01	45.15	45.32	45.54	45.76	45.98	46.15
Short Circuit Current (Isc)	18.23	18.26	18.29	18.32	18.35	18.38	18.41
Maximum Power Voltage (Vmp)	37.10	37.29	37.46	37.65	37.85	38.03	38.20
Maximum Power Current (Imp)	17.24	17.30	17.36	17.40	17.44	17.49	17.54
Module Efficiency (nm)	20.60	20.76	20.92	21.09	21.25	21.41	21.57
Power Tolerance	(-0, +5W)						
Maximum System Voltage	1500V(UL & IEC)						
Maximum Series Fuse Rating	30 Amp						
*STC Irradiance 1000W/m <sup>2</sup> , Module Temperature 25°C and AM 1.5 Measuring Tolerance: ±3%							

### ELECTRICAL CHARACTERISTICS(NOCT)

MODULE TYPE	PE 640G12HGB	PE 645G12HGB	PE 650G12HGB	PE 655G12HGB	PE 660G12HGB	PE 665G12HGB	PE 670G12HGB
Maximum Power (Pmp)	471	474	478	482	485	489	491
Open Circuit Voltage (Voc)	42.09	42.19	42.35	42.55	42.76	42.96	43.12
Short Circuit Current (Isc)	14.53	14.56	14.58	14.60	14.62	14.64	14.68
Maximum Power Voltage (Vmp)	34.43	34.60	34.76	34.94	35.12	35.29	35.45
Maximum Power Current (Imp)	13.68	13.71	13.76	13.79	13.82	13.86	13.90
Module Efficiency (nm)	18.17	18.31	18.45	18.59	18.74	18.88	19.02
*NOCT- Irradiance 800 W/m <sup>2</sup> , AM 1.5, Ambient Temperature 25°C and Wind speed 1m/s Measuring Tolerance: ±3%							

BIFACIAL GAIN (70 ± 10%)		PE 640G12HGB	PE 645G12HGB	PE 650G12HGB	PE 655G12HGB	PE 660G12HGB	PE 665G12HGB	PE 670G12HGB
10%	Power Pmp	704.0	709.5	715.0	720.5	726.0	731.5	737.0
20%	Power Pmp	768.0	774.0	780.0	786.0	792.0	798.0	804.0
30%	Power Pmp	832.0	838.5	845.0	851.5	858.0	864.5	871.0
• Bifacial gains depends on the power plant design and albedo of installation site • Power Bifaciality = Pmax(Rear)/Pmax(Front) and Pmax Front are tested under STC Measuring Tolerance: ±3%								

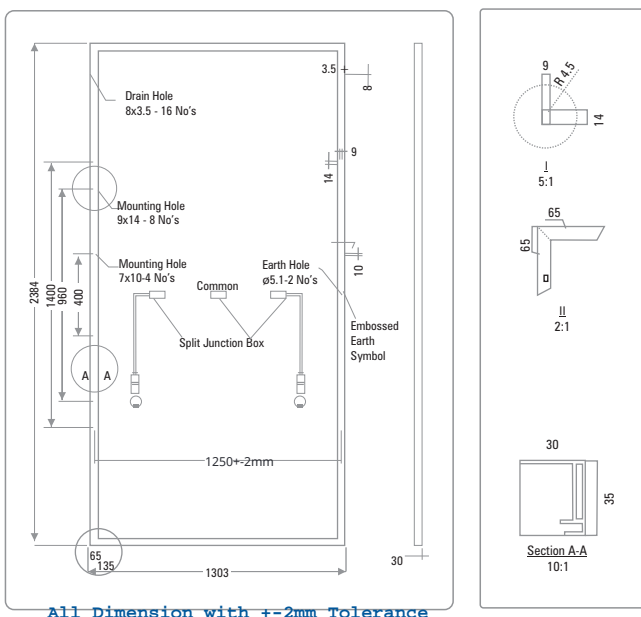
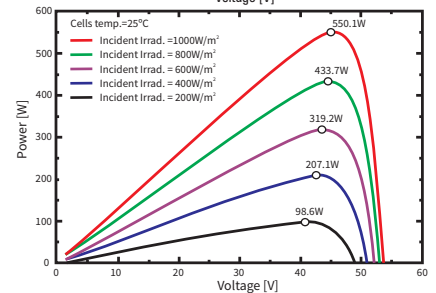
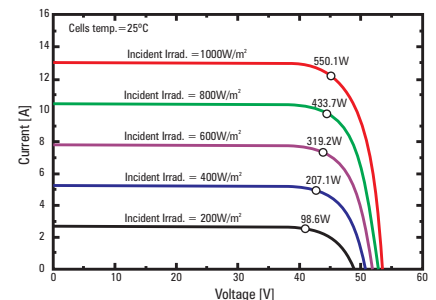
### TEMPERATURE CHARACTERISTICS

Pmax Temperature Coefficient	-0.35%/°C
Voc Temperature Coefficient	-0.27%/°C
Isc Temperature Coefficient	0.04%/°C
Operating Temperature	-40°C To + 85°C
Nominal Operating Cell Temperature	42 ± 3° C

#### Product Certificates\*

IEC 61215, 61730/ INMETRO

UL 61730/IEC 61701/IEC 62716/IEC 60068-2-68



### MECHANICAL SPECIFICATIONS

External Dimensions	2384(±2mm) x 1303 (±2mm) x 35(±1mm)
Weight	38 (± 3%) Kg
Solar Cells	12 BB, Mono PERC- crystalline 105mm x210mm
Front Glass	2 mm, High Transmission, Heat Strengthened Glass
Rear Cover	2mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy (Silver/Black)
Junction Box	3 Split, IP 68 Rated
Connector	Mc4 Compatible
Mechanical Load	5400 Pa For Snow Load, 2400 Pa Wind Load
Fire Performance	TYPE 29 ( UL 61730) Or Class C (IEC 61730)
Output Cable	4.0 mm <sup>2</sup> 400 mm Length

### FRAME PROFILE 35X30(Long) AND 35X15MM(Short)

### PACKING CONFIGURATION

Container	32' GP	40'HQ
Pieces per Pallet	31	31
Pallets per Container	8	17
Pieces per Container	248	527

**FIRST YEAR DEGRADATION < 2.0%**

**YEAR 2-30 POWER DEGRADATION < 0.45%**

For more details, please contact:

**PREMIER ENERGIES GROUP**

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The specification and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement, Premier Energies reserves the right to make necessary adjustment to the information described herein at any time without further notice.