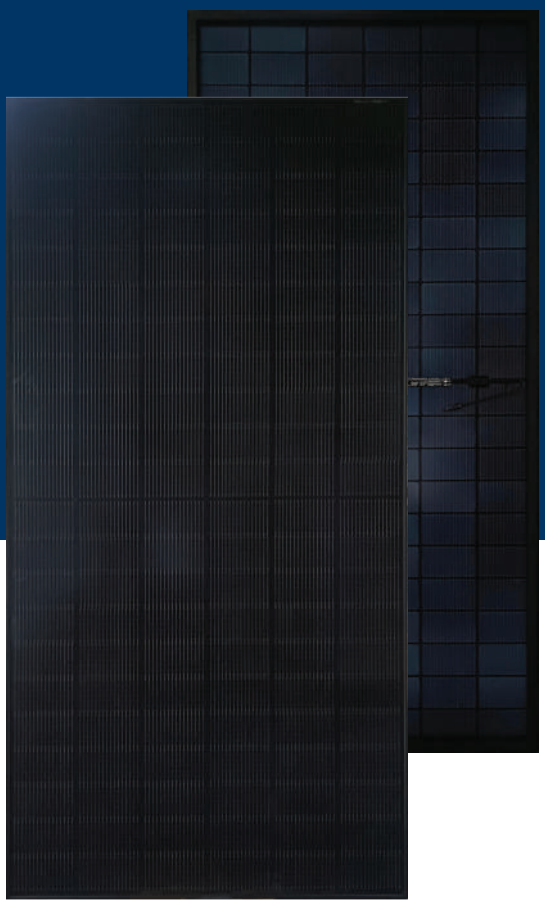
Premier Energies



FULL BLACK SOLAR PV MODULE

132 HALF CUT TOPCon MODULE

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

NeoBlack DCR

Suitable for

RESIDENTIAL

COMMERCIAL

UTILITY

OFF-GRID

Transition to BLACK-Reduce Glare for Social Harmony

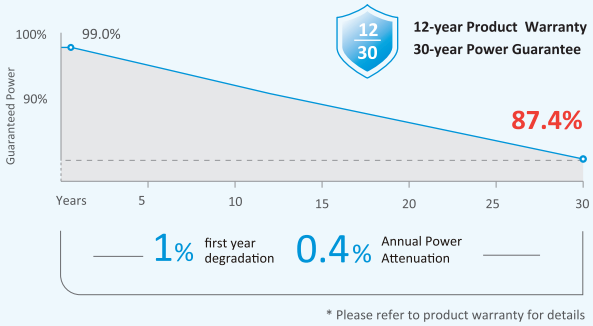
Better Aesthetic & Premium Appearance
All-Black modules give a uniform elegant look to blend seamlessly with rooftops-especially modern residential homes & luxury commercial buildings.

PID & Strong weather Resistant
Excellent Anti-PID performance combined with advanced encapsulation enhances durability, ensuring reliable operation in harsh environmental conditions.

Auto Bussing & Soldering Technology
Induction based improved soldering quality and on-line detection to ensure defect free module

High Light Capture Efficiency
Engineered for superior photon absorption even in low and diffused light conditions-powered by cutting-edge in-house cell architecture.

Performance Warranty



* Please refer to product warranty for details

Certification

IEC 61215
IEC 61730
Regular Production Surveillance
www.tuv.com
ID 1111261827

R-63003719
R-63004740

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

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)[1]	600	605	610	615	620	625	630
Open Circuit Voltage, V (Voc)[1]	48.79	48.93	49.06	49.20	49.34	49.47	49.61
Short Circuit Current , A (Isc)[1]	15.60	15.61	15.62	15.63	15.64	15.65	15.66
Maximum Power Voltage, V (Vmp)[1]	41.03	41.21	41.39	41.57	41.76	41.96	42.13
Maximum Power Current , A (Imp)[1]	14.63	14.68	14.74	14.80	14.85	14.90	14.96
Module Fill Factor, % (FF)[1]	78.83	79.21	79.60	79.97	80.34	80.73	81.09
Module Efficiency, % (Eff)	22.21	22.40	22.58	22.76	22.95	23.13	23.32
Temperature Coefficients of Pmax[2]	-0.29%/°C						
Temperature Coefficients of Voc[2]	-0.25%/°C						
Temperature Coefficients of Isc[2]	+0.045%/°C						

STC Irradiance 1000W/m², Module Temperature 25°C, AM1.5G [1] Measurement Uncertainty : ±3%

[2] Due to different testing methods, the actual performances might marginally differ from the declared specifications.

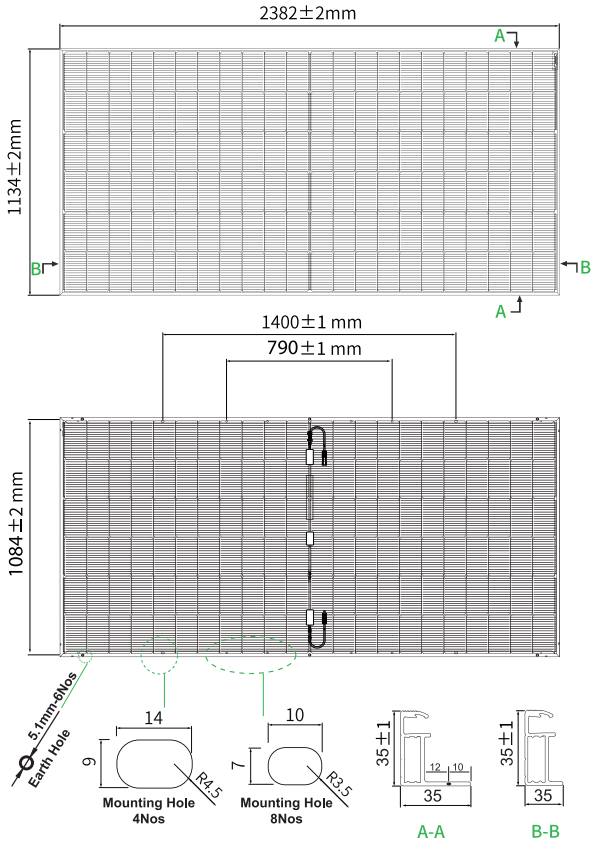
Electrical Characteristics (NOCT)

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)	456	459	463	467	471	475	479
Open Circuit Voltage, V (Voc)	45.89	46.02	46.14	46.27	46.40	46.53	46.66
Short Circuit Current, A (Isc)	12.59	12.60	12.61	12.62	12.63	12.64	12.65
Maximum Power Voltage, V (Vmp)	38.59	38.76	38.93	39.10	39.28	39.44	39.62
Maximum Power Current, A (Imp)	11.81	11.85	11.90	11.94	11.99	12.03	12.08
Module Fill Factor, % (FF)	78.87	79.20	79.61	79.95	80.36	80.72	81.13
Module Efficiency, % (Eff)	16.87	17.00	17.15	17.28	17.44	17.57	17.73

NOCT- Irradiance 800 W/m², 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	665	671	676	682	688	693	698
20%	Power Pmp,W	720	726	732	738	744	750	756
30%	Power Pmp,W	780	786	793	800	806	812	819

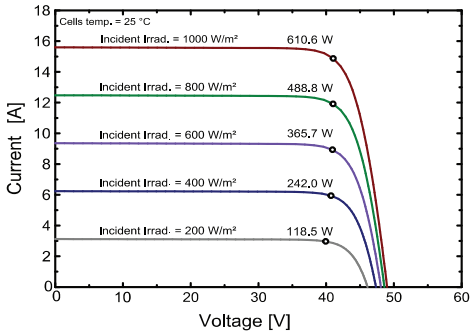
Bifacial gains depends on the power plant design & albedo of installation site Measurement Uncertainty : ±3%

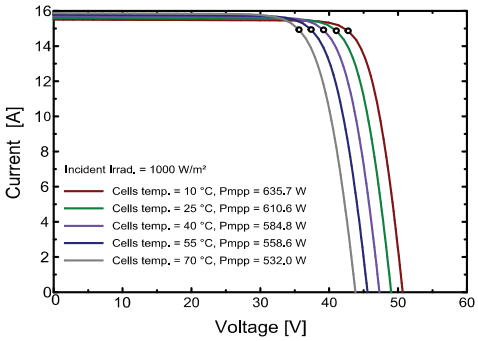


FIRST YEAR DEGRADATION < 1.0% | YEAR 2-30 POWER DEGRADATION < 0.40%

Application Conditions

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 %





Mechanical Specifications

Cell Type	N-TYPE, 16BB
No. of Cells	132 (66X2), (105x182.3±1mm)
Dimensions	(2382X1134x35)mm
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 mm²/ +Ve 400mm & -Ve 200mm

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

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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 & product enhancement, Premier Energies reserves the right to make necessary adjustment to the information described herein at any time without further notice.