Premier Energies

SOLAR PV MODULE

132 HALF CUT PERC CELL

BIFACIAL DUAL GLASS 485-515 W

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 lead (2400 Pascal) and snow load (5400 Pascal)

High Performance Guarantee!

30 YEARS
LINEAR POWER OUTPUT WARRANTY

12 YEARS
PRODUCT WARRANTY

Suitable for

RESIDENTIAL

UTILITY

COMMERCIAL

OFF-GRID

Certification

IEC 61215 | IEC 61730 | IEC 61701 (Salt Mist) | IEC 62716 (Ammonia)
IEC 62782 (DMLT) | IEC 61853-2 (Panfile & IAM) | LID, LETID
IEC 60068 (Sand & Dust) | IEC 62804 (PID) | CEC, CE | IEC 61730

MADE WITH PREMIER ENERGIES M10 CELLS

M10-182MM WAFER, IDEAL FOR ULTRA-LARGE POWER PLANT

AVAILABLE IN ALL BLACK RANGE

Electrical Characteristics (STC)

MODULE TYPE	PE-485HGB	PE-490HGB	PE-495HGB	PE-500HGB	PE-505HGB	PE-510HGB
Maximum Power (Pmp)	485	490	495	500	505	510
Open Circuit Voltage (Voc)	45.02	45.13	45.28	45.39	45.53	45.66
Short Circuit Current (Isc)	13.70	13.81	13.92	14.04	14.15	14.27
Maximum Power Voltage (Vmp)	37.90	38.05	38.14	38.23	38.32	38.41
Maximum Power Current (Imp)	12.80	12.88	12.98	13.08	13.18	13.28
Module Efficiency (%)	20.43	20.86	21.07	21.07	21.27	21.48
Power Tolerance	0 to+5W					
Maximum System Voltage	1500V(UL & IEC)					
Maximum Series Fuse Rating	25 Amp					

*STC Irradiance 1000W/m², Module Temperature 25°C and AM 1.5 Measuring Tolerance: ±3%

Electrical Characteristics (NOCT)

MODULE TYPE	PE-485HGB	PE-490HGB	PE-495HGB	PE-500HGB	PE-505HGB	PE-510HGB
Maximum Power (Pmp)	357	364	364	368	370	375
Open Circuit Voltage (Voc)	42.06	42.17	42.31	42.41	42.54	42.66
Short Circuit Current (Isc)	10.92	11.01	11.10	11.19	11.28	11.38
Maximum Power Voltage (Vmp)	35.17	35.31	35.39	35.47	35.56	35.64
Maximum Power Current (Imp)	10.14	10.21	10.29	10.37	10.45	10.53
Module Efficiency (nm)	15.03	15.19	15.34	15.50	11.65	15.81

*NOCT- Irradiance 800 W/m², AM 1.5, Ambient Temperature 20°C & Wind speed 1m/s Measuring Tolerance: ±3%

FOR PEIPL, MODEL CODE: PEI-132 - XXXHGB – M10 (WHERE, XXX – 485 to 510 IN STEPS OF 5W)

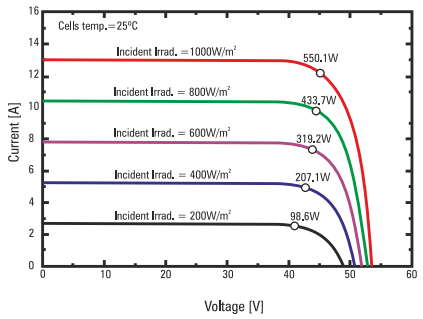
GAIN		PE-485HGB	PE-490HGB	PE-495HGB	PE-500HGB	PE-505HGB	PE-510HGB
10%	Power Pmp	539	544.5	550.0	555.5	561.0	566.5
20%	Power Pmp	588	594.0	600.0	606.0	612.0	618.0
30%	Power Pmp	687	643.5	650.0	656.5	663.0	665.5

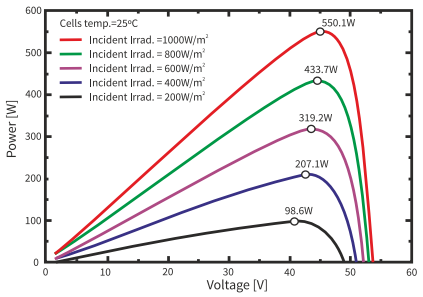
- Bifacial gains depends on the power plant design & albedo of installation site
- Power Bifaciality=Pmax(Rear)/Pmax(Front) are tested under STC

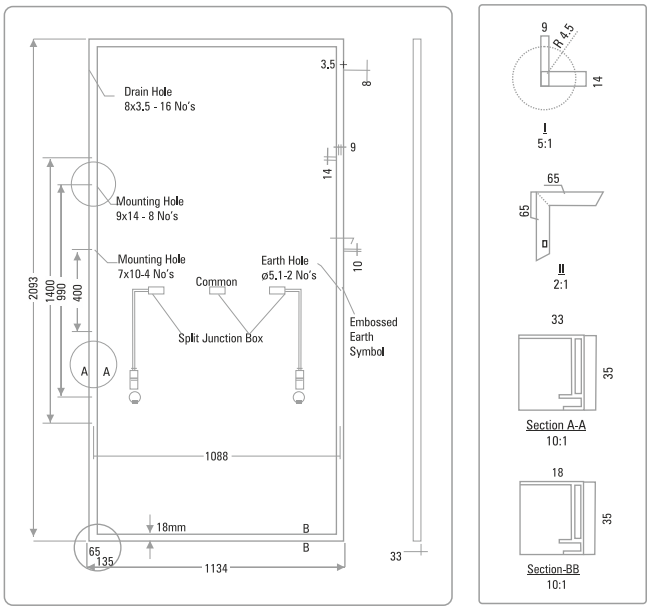
Measuring Tolerance: ±3%

Temperature Characteristics

Pmax Temperature Coefficient Up to	-0.35%/°C
Voc Temperature Coefficient Up to	-0.30%/°C
Ise Temperature Coefficient	0.04%/°C
Operating Tempertarure	-40°C To + 85°C
Nominal Operating Cell Temperature	42 ± 3° C







Mechanical Specifications

External Dimensions	2093(±2mm) x 1134 (±2mm) x 35(±1mm)
Weight	29 (± 3%) Kg
Solar Cells	10 BB, Mono PERC - crystalline 91mm x 182mm ± 1mm
Front Glass	2.0 mm, ARC Semi Tempered, HS Glass
Rear Cover	2.0 mm, ARC Semi Tempered, HS 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 39 (UL 61730) Or Class C (IEC 61730)
Output Cable	4.0 mm2 | 400 mm Length

Frame Profile 35x33(Long) & 35x18mm(Short)

Packing Configuration

Container	40'HQ	32'GP
Pieces per Pallet	31	31
Pallets per Container	20	22
Pieces per Container	496	682

FIRST YEAR DEGRADATION < 2.0%

YEAR 2-30 POWER DEGRADATION < 0.45%

sales@premierenergies.com | premierenergies.com