



SOLAR PV MODULE (DCR/NON-DCR)

# 144 HALF CUT PERC CELL

BIFACIAL DUAL GLASS 530-560 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 load (2400 Pascal) and snow load (5400 Pascal)

## High Performance Guarantee!



**LINEAR POWER  
OUTPUT WARRANTY**



**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 61853-1 & 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)

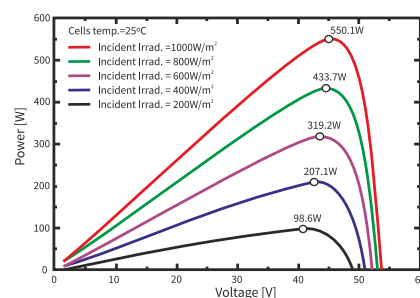
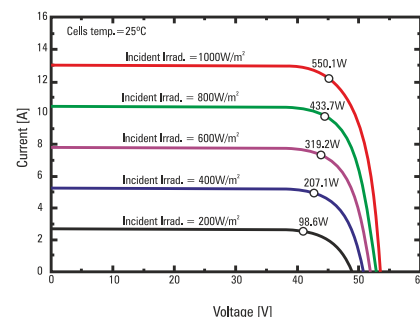
MODULE TYPE	PE-530HGB	PE-535HGB	PE-540HGB	PE-545HGB	PE-550HGB	PE-555HGB	PE-560HGB
Maximum Power (Pmp)	530	535	540	545	550	555	560
Open Circuit Voltage (Voc)	49.43	49.51	49.68	49.76	49.82	49.88	49.91
Short Circuit Current (Isc)	13.70	13.82	13.94	13.99	14.06	14.12	14.21
Maximum Power Voltage (Vmp)	41.02	41.11	41.21	41.30	41.38	41.41	41.43
Maximum Power Current (Imp)	12.93	13.03	13.11	13.21	13.31	13.41	13.52
Module Efficiency (%)	20.52	20.71	20.90	21.10	21.29	21.48	21.67
Power Tolerance	0 to+5W						
Maximum System Voltage	1500V(UL & IEC)						
Maximum Series Fuse Rating	25 Amp						
*STC Irradiance 1000W/m <sup>2</sup> , Module Temperature 25°C and AM 1.5				Measuring Tolerance: ±3%			

## Temperature Characteristics

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

## Electrical Characteristics (NOCT)

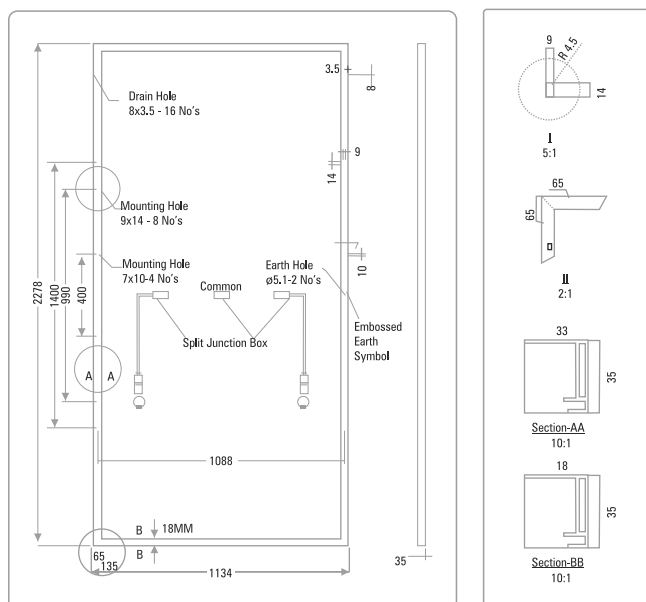
MODULE TYPE	PE-530HGB	PE-535HGB	PE-540HGB	PE-545HGB	PE-550HGB	PE-555HGB	PE-560HGB
Maximum Power (Pmp)	390	394	397	401	405	408	412
Open Circuit Voltage (Voc)	46.19	46.26	46.42	49.49	46.55	46.61	46.63
Short Circuit Current (Isc)	10.92	11.02	11.11	11.15	11.21	11.26	11.33
Maximum Power Voltage (Vmp)	38.06	38.15	38.24	38.32	38.40	38.42	38.44
Maximum Power Current (Imp)	10.24	10.32	10.39	10.46	10.53	10.62	10.72
Module Efficiency (nm)	15.09	15.23	15.38	15.52	15.66	15.80	15.95
*NOCT- Irradiance 800 W/m <sup>2</sup> , AM 1.5, Ambient Temperature 25°C & Wind speed 1m/s				Measuring Tolerance: ±3%			



## FOR PEIPL, MODEL CODE: PEI-144 - XXXHGB - M10 (WHERE, XXX – 530 to 560 IN STEPS OF 5W)

GAIN		PE-530HGB	PE-535HGB	PE-540HGB	PE-545HGB	PE-550HGB	PE-555HGB	PE-560HGB
10%	Power Pmp	583.0	588.5	594.0	599.5	605.0	610.5	616.0
20%	Power Pmp	636.0	642.0	648.0	654.0	660.0	666	672.0
30%	Power Pmp	689.0	695.5	702.0	708.5	715.0	721.5	728.0

- 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%



## Mechanical Specifications

External Dimensions	2278(±2mm) x 1134 (±2mm) x 35(±1mm)
Weight	34 (± 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
Pieces per Pallet	31
Pallets per Container	20
Pieces per Container	620

FIRST YEAR  
DEGRADATION  
< 2.0%

YEAR 2-30 POWER  
DEGRADATION  
< 0.45%

