



SOLAR PV MODULE (DCR/NON-DCR)

144 HALF CUT PERC CELL

BIFACIAL DUAL GLASS (M10/M10R) 530-560 W

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 Resistant

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

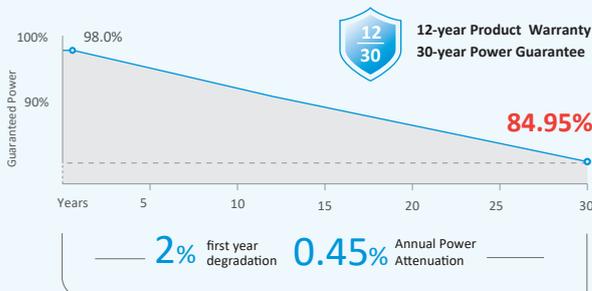
Induction based Improved soldering quality and on-line detection to ensure defect free module



Enhanced Mechanical Load

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

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

MADE WITH PREMIER ENERGIES M10R CELLS

M10/M10R - 182mm CELL, IDEAL FOR ULTRA-LARGE POWER PLANT

ALSO AVAILABLE IN FULL BLACK MODULE



Electrical Characteristics (STC)



MODULE TYPE	PEI-144-530 HGB-M10	PEI-144-535 HGB-M10	PEI-144-540 HGB-M10	PEI-144-545 HGB-M10	PEI-144-550 HGB-M10	PEI-144-555 HGB-M10	PEI-144-560 HGB-M10
Maximum Power, W (Pmp) ¹	530	535	540	545	550	555	560
Open Circuit Voltage, V (Voc) ¹	49.43	49.51	49.59	49.67	49.75	49.83	49.91
Short Circuit Current, A (Isc) ¹	13.70	13.80	13.90	14.00	14.10	14.20	14.30
Maximum Power Voltage, V (Vmp) ¹	41.02	41.09	41.16	41.23	41.29	41.36	41.42
Maximum Power Current, A (Imp) ¹	12.93	13.03	13.13	13.23	13.33	13.43	13.53
Module Fill Factor, % (FF) ¹	78.26	78.30	78.34	78.37	78.41	78.44	78.46
Module Efficiency, % (Eff)	20.52	20.71	20.90	21.10	21.29	21.48	21.68
Temperature Coefficients of Pmax ²					-0.35%/°C		
Temperature Coefficients of Voc ²					-0.30%/°C		
Temperature Coefficients of Isc ²					0.04%/°C		
STC Irradiance 1000W/m ² , Module Temperature 20°C, AM1.5G					Measurement Uncertainty: ±3%		

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

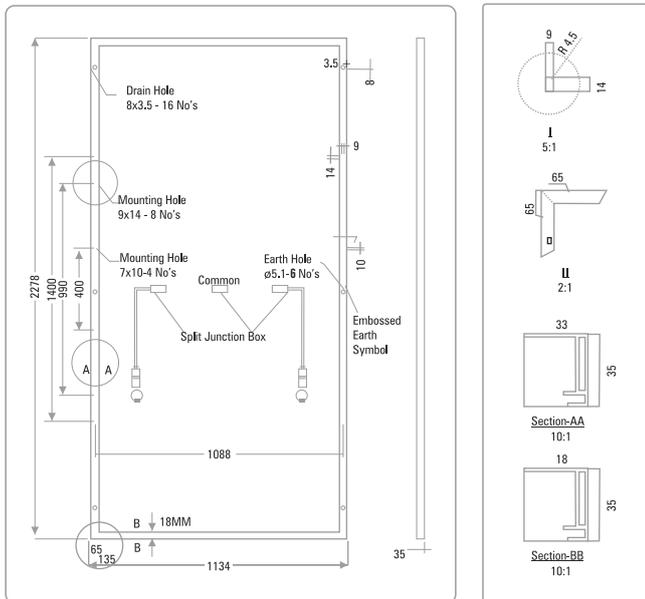
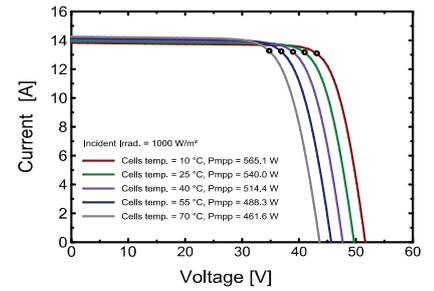
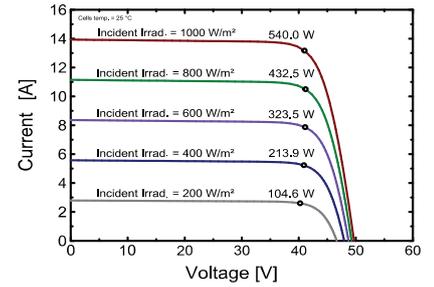
Electrical Characteristics (NOCT)

MODULE TYPE	PEI-144-530 HGB-M10	PEI-144-535 HGB-M10	PEI-144-540 HGB-M10	PEI-144-545 HGB-M10	PEI-144-550 HGB-M10	PEI-144-555 HGB-M10	PEI-144-560 HGB-M10
Maximum Power, W (Pmp)	398	402	406	409	413	417	421
Open Circuit Voltage, V (Voc)	46.00	46.07	46.15	46.22	46.30	46.37	46.45
Short Circuit Current, A (Isc)	11.05	11.13	11.21	11.29	11.37	11.45	11.53
Maximum Power Voltage, V (Vmp)	38.17	38.24	38.30	38.37	38.42	38.49	38.55
Maximum Power Current, A (Imp)	10.43	10.51	10.59	10.67	10.75	10.83	10.91
Module Fill Factor, % (FF)	78.32	78.36	78.40	78.44	78.46	78.50	78.52
Module Efficiency, % (Eff)	15.41	15.55	15.70	15.85	15.99	16.14	16.28
NOCT- Irradiance 800 W/m ² , Ambient Temperature 25°C AM1.5G, Wind speed 1m/s					Measurement Uncertainty: ±3%		

Bifacial Gain		PEI-144-530 HGB-M10	PEI-144-535 HGB-M10	PEI-144-540 HGB-M10	PEI-144-545 HGB-M10	PEI-144-550 HGB-M10	PEI-144-555 HGB-M10	PEI-144-560 HGB-M10
10%	Power Pmp,W	583.0	588.5	594.0	599.5	605.0	610.5	616.0
20%	Power Pmp,W	636.0	642.0	648.0	654.0	660.0	666	672.0
30%	Power Pmp,W	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					Measurement Uncertainty: ±3%			

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	70 ± 10%



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

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%

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