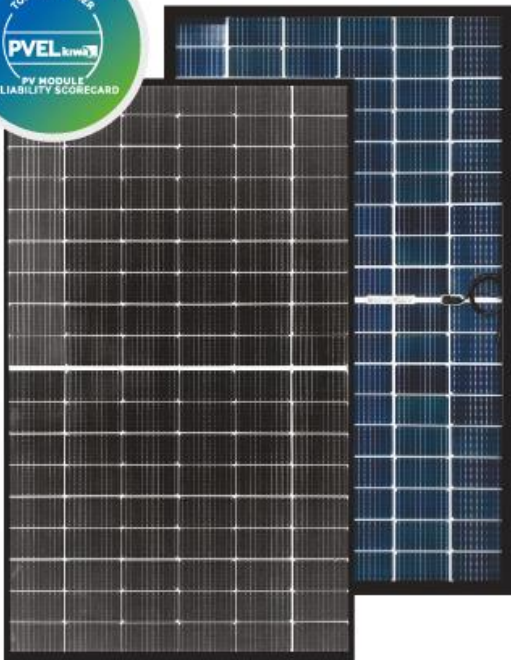




SOLAR PV MODULE

144 HALF CUT PERC CELL

BIFACIAL TRANSPARENT BACKSHEET 525-555W



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).

Made with Premier Energies M10 Cells

M10-182mm wafer, Ideal for Ultra- large Power Plant

AVAILABLE IN ALL BLACK RANGE

30 YEARS

WARRANTY FOR
LINEAR POWER OUTPUT

12 YEARS

PRODUCT WARRANTY

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) |

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

IDEAL FOR



Residential



Commercial



Utility

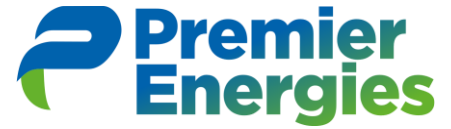


Off-grid

SOLAR PV MODULE

144 HALF CUT PERC CELL

BIFACIAL TRANSPARENT BACKSHEET 525-555W



ELECTRICAL CHARACTERISTICS(STC)

Module Type	PE 525HB	PE 530HB	PE 535HB	PE 540HB	PE 545HB	PE 550HB	PE 555HB
Maximum Power (Pmp)	525	530	535	540	545	550	555
Open Circuit Voltage (Voc)	49.33	49.43	49.51	49.68	49.76	49.82	49.88
Short Circuit Current (Isc)	13.63	13.70	13.82	13.94	13.99	14.06	14.12
Maximum Power Voltage (Vmp)	40.93	41.02	41.11	41.21	41.30	41.38	41.41
Maximum Power Current (Imp)	12.83	12.93	13.03	13.11	13.21	13.31	13.41
Module Efficiency (ηm)	20.32	20.52	20.71	20.90	21.10	21.29	21.48
Power Tolerance	0 to +5W						
Maximum System Voltage	1500V (UL & IEC)						
Maximum Series Fuse Rating	25Amp						

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

ELECTRICAL CHARACTERISTICS(NOTC)

Module Type	PE 525HB	PE 530HB	PE 535HB	PE 540HB	PE 545HB	PE 550HB	PE 555HB
Maximum Power (Pmp)	390	390	394	397	401	405	408
Open Circuit Voltage (Voc)	46.09	46.19	46.26	46.42	49.49	46.55	46.61
Short Circuit Current (Isc)	10.87	10.92	11.02	11.11	11.15	11.21	11.26
Maximum Power Voltage (Vmp)	37.98	38.06	38.15	38.24	38.32	38.40	38.42
Maximum Power Current (Imp)	10.17	10.24	10.32	10.39	10.46	10.53	10.62
Module Efficiency (ηm)	14.95	15.09	15.23	15.38	15.52	15.66	15.76

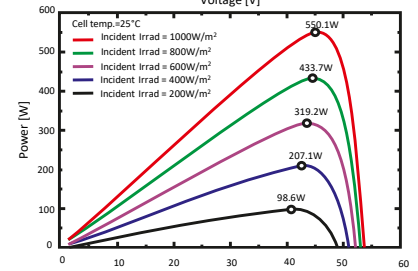
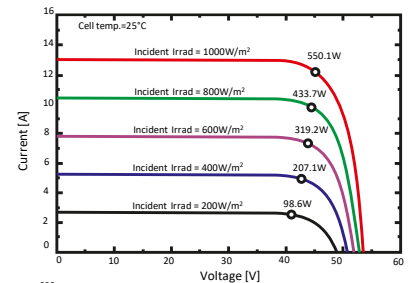
* NOCT - Irradiance 800 W/m², AM 1.5, Ambient temperature 20°C and Wind speed 1m/s Measuring Tolerance: ±3%

Gain	PE 525HB	PE 530HB	PE 535HB	PE 540HB	PE 545HB	PE 550HB	PE 555HB
10% Power (Pmp)	577.5	583.0	588.5	594.0	599.5	605.0	610.5
20% Power (Pmp)	630.0	636.0	642.0	648.0	654.0	660.0	666.0
30% Power (Pmp)	682.5	689.0	695.5	702.0	708.5	715.0	721.5

• Bifacial gains depends on the power plant design and albedo of installation site
 • Power Bifaciality=Pmax(Rear)/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



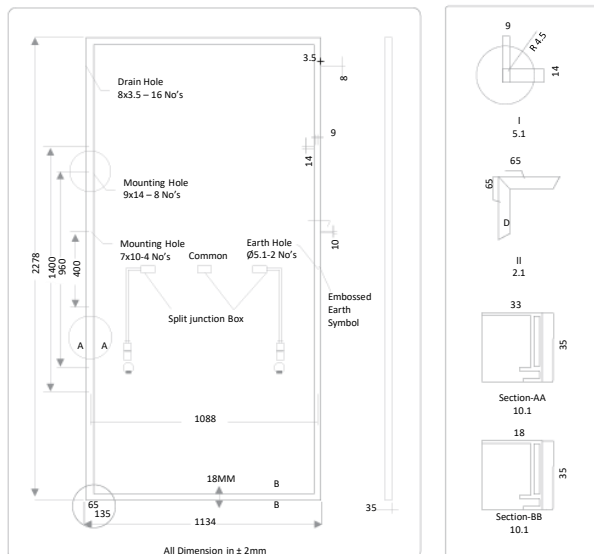
MECHANICAL SPECIFICATIONS

External Dimension	2278(±2mm)x 1134(±2mm)x35(±1mm)
Weight	28 (±3%)Kg
Solar Cells	10B, Mono PERC-crystalline 91mm x 182mm
Front Glass	3.2 mm High Transmission , Low Iron, Tempered Glass
Rear Cover	High Transparent Backsheet
Frame	Anodized Aluminium Alloy (Silver/Black)
Junction Box	3 Split, IP 68 Rated
Connector	MC 4 Compatible
Mechanical Load	5400 Pa for Snow Load, 2400 Pa Wind Load
Fire Performance	TYPE 4 (UL 61730) Or Class C (IEC 61730)
Output Cable	4.0 mm ² 400mm Length

FRAME PROFILE 35X33MM (LONG) AND 35X18MM (SHORT)

PACKING CONFIGURATION

Container	20'GP	32'GP	40'HQ
Pieces per Pallet	31	31	31
Pallet per Container	8	20	20
Pieces per Container	248	496	620



FIRST YEAR DEGRADATION < 2.0%

YEAR 2-30 POWER DEGRADATION 0.45%

For more details, please contact:

PREMIER ENERGIES GROUP

sales@premierenergies.com | premierenergies.com

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.