

# P-type PERC

144 Half-Cut PERC Cell  
 Bifacial Transparent Backsheet

Model No: FSP-M10.144B-XXX  
 (where XXX = 525-560)

-  Outstanding Power Generation
-  PID Free/Low LID Protection
-  Lower Temperature Coefficient
-  Less Hot Spot Shading Effects
-  Enhanced Bifacial Factor
-  Exceptional Mechanical Resistance
-  DCR Panels Available



<b>21.68%</b> Maximum Efficiency	<b>560 Wp</b> Maximum Power Output
<b>0~+4.99 W</b> Positive Power Tolerance	<b>GRADE A</b> Cells Guaranteed

Certifications (Under process)



BIS | IEC 61730 | IEC 61215 | IEC 61853 1 & 2 (PAN File) | IEC 62804 (PID) | UL 61730 | CE

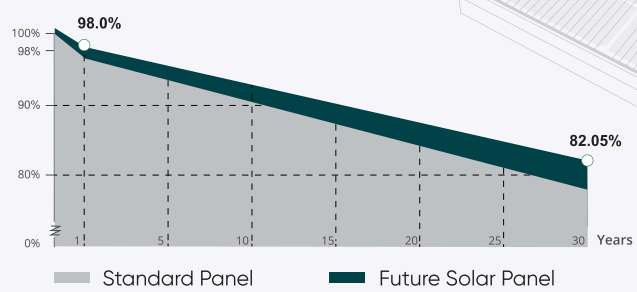
For more details, please contact:  
**FS Green Energies Pvt. Ltd.**

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## LINEAR PERFORMANCE WARRANTY

1<sup>st</sup> Year Degradation < 2%  
 2-30<sup>th</sup> Year Degradation < 0.55% p.a.



 M10 Cells (182mm) 10BB

 Residential

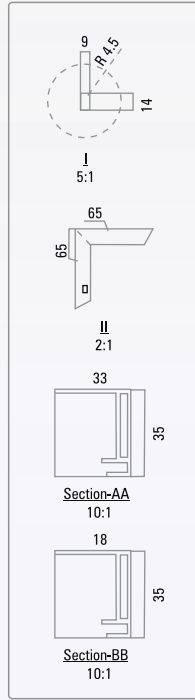
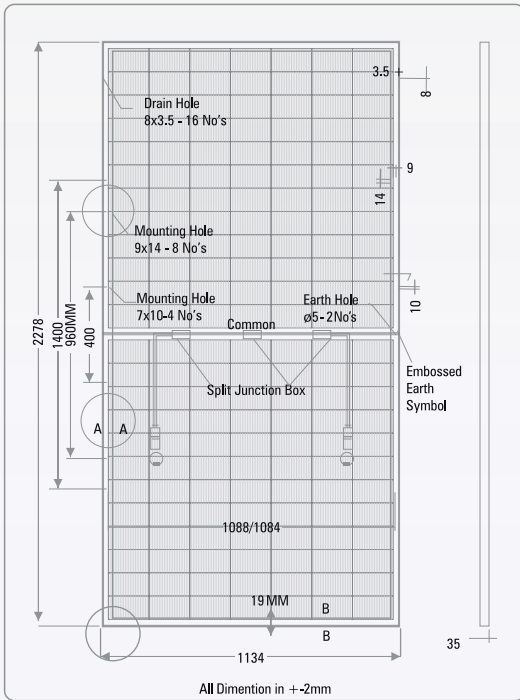
 Commercial & Industrial

 Utility

\*T&C Apply

# SOLAR PV MODULE

Half-Cut PERC Cell  
Bifacial Transparent Backsheet 525-560 Wp



## MECHANICAL SPECIFICATIONS

External Dimension	2278 (±2 mm) X 1134 (±2 mm) X 35 (±1 mm)
Weight	28 kg
Solar Cells	10BB, Mono PERC, 91 mm X 182 mm
Front Glass	3.2 mm High Transmission, Low Iron, Tempered Glass
Rear Cover	High Transparent Backsheet
Frame	Anodized Aluminium Alloy (Silver)
Junction Box	3 Split, IP 68 Rated
Connector	MC4 Compatible
Mechanical Load	5400 Pa for Snow Load, 2400 Pa Wind Load
Output Cable	4.0 mm <sup>2</sup> / 400 mm Length

## PACKING CONFIGURATION

Container	40' HQ
Pieces per Pallet	31
Pallet per Container	20
Pieces per Container	620

## ELECTRICAL CHARACTERISTICS (STC)

FSP-M10.144B-XXX	525	530	535	540	545	550	555	560
Peak power, P Max (Wp)	525	530	535	540	545	550	555	560
Maximum voltage, Vmp (V)	41.30	41.45	41.66	41.82	41.96	42.13	42.27	42.41
Maximum Current, Imp (A)	12.72	12.81	12.86	12.93	13.00	13.07	13.15	13.21
Open Circuit Voltage, Voc (V)	49.19	49.35	49.59	49.80	49.95	50.10	50.25	50.39
Short Circuit current, Isc (A)	13.48	13.56	13.63	13.70	13.76	13.83	13.89	13.96
Module Efficiency (%)	20.32%	20.52%	20.71%	20.90%	21.10%	21.29%	21.48%	21.68%
Fill Factor (%)	79.23%	79.35%	79.26%	79.26%	79.36%	79.47%	79.64%	79.64%
Power Tolerance	0 to +4.99 W							
Maximum System Voltage	1500 V (IEC&UL)							
Maximum Series Fuse Rating	25 A							

\* STC - Irradiance = 1000 W/m<sup>2</sup>, Module Temperature = 25 °C and AM = 1.5 Measuring Tolerance = ±3%

## ELECTRICAL CHARACTERISTICS (NOCT)

FSP-M10.144B-XXX	525	530	535	540	545	550	555	560
Nominal Maximum Power (W)	392	395	399	403	406	409	412	416
Maximum voltage, Vmp (V)	37.80	37.94	38.10	38.25	38.39	38.50	38.62	38.74
Maximum Current, Imp (A)	10.36	10.42	10.47	10.54	10.58	10.62	10.68	10.74
Open Circuit Voltage, Voc (V)	45.75	45.91	46.11	46.31	46.44	46.57	46.74	46.81
Short Circuit current, Isc (A)	11.01	11.06	11.13	11.19	11.25	11.31	11.36	11.43

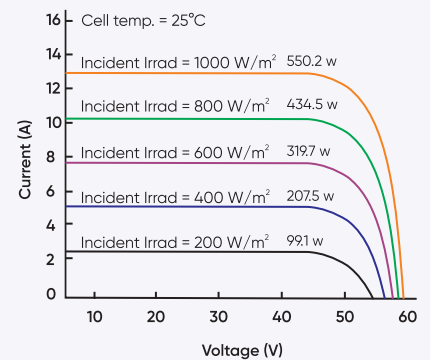
\* NOCT - Irradiance = 800 W/m<sup>2</sup>, AM = 1.5, Ambient Temperature = 20° C, Wind Speed = 1 m/s, Measuring Tolerance = ±3%

Gain	FSP-M10.144B-XXX	525	530	535	540	545	550	555
5%	Max. Power (P max)	551.25	556.50	561.75	567.00	572.25	577.50	582.75
10%	Max. Power (P max)	577.50	583.00	588.50	594.00	599.50	605.00	610.50
20%	Max. Power (P max)	630.00	636.00	642.00	648.00	654.00	660.00	666.00
30%	Max. Power (P max)	682.50	689.00	695.50	702.00	708.50	715.00	721.50

\* Bifacial Gain :The additional gain from the backside compared to the power of the front side at STC, It depends on mounting structure, Height, Angle, Ground surface etc.

## TEMPERATURE CHARACTERISTICS

Pmax Temp. Coefficient	-0.33
Voc Temp. Coefficient	-0.26
Isc Temp. Coefficient	+0.06
Operating Temp.	-40°C to +85°C
Nominal Operating Cell Temp.	45±2°C



## FS Green Energies Pvt. Ltd.

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