

# Bifacial Solar PV Module

## 525Wp - 550Wp

### TECHNICAL DATA

Electrical Parameter at STC	Bifacial Monocrystalline Module					
Module Type	SEPLM10-AAA-GB					
Capacity rating – Pmax(Wp)	525	530	535	540	545	550
Power Tolerance (%)	0-2	0-2	0-2	0-2	0-2	0-2
Module efficiency (%)	20.34	20.53	20.73	20.92	21.12	21.31
Rated voltage -Vmp(V)	40.92	41.08	41.22	41.38	41.54	41.71
Rated current - Imp(A)	12.82	12.9	12.98	13.04	13.11	13.18
Open circuit voltage - Voc(V)	48.7	48.89	49.09	49.3	49.48	49.67
Short circuit current - Isc(A)	13.44	13.5	13.58	13.67	13.74	13.83

Under Standard Test Conditions (STC) of irradiance 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C. Except Pmax, all other parameters have a tolerance of ±3%

### Electrical Parameter at NOCT

Capacity rating - Pmax(Wp)	388	392	396	399	403	407
Rated voltage - Vmp(V)	38.13	38.28	38.42	38.60	38.75	38.90
Rated current - Imp(A)	10.19	10.24	10.30	10.35	10.41	10.47
Open circuit voltage - Voc(V)	45.56	45.74	45.92	46.09	46.27	46.45
Short circuit current - Isc(A)	10.81	10.88	10.93	11.01	11.08	11.14

Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, Module temperature 45°C, wind speed 1 m/sec

### BI-FACIAL: Pmax with Rear Side Power Gain\*

5% Gain	551	557	562	567	572	578
10% Gain	578	583	589	594	600	605
15% Gain	604	610	615	621	627	633
20% Gain	630	636	642	648	654	660

\*Additional power gain from rear side compared to power off front side at STC depends on mounting structure (height, tilt angle etc.) and reflectivity of ground. **Bi-Faciality Factor : 70 ± 5 %**

### Permissible Operating Conditions

Temperature range	-40°C to + 85°C
Maximum system voltage	1500 VDC
NOCT	45 ± 2°C
Hail resistance.	Max. diameter of 25 mm with velocity 23 m/s

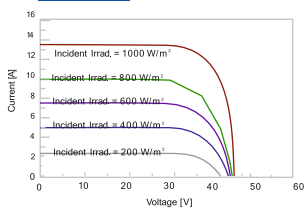
### Temperature Coefficient(TC)

Temperature coefficient (Voc)	- 0.28% /°C
Temperature coefficient (Isc)	0.048% /°C
Temperature coefficient (Pmax)	-0.35% /°C

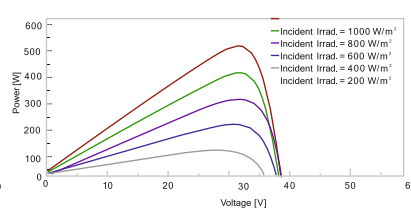
### Packaging Configuration\*\*

Nuber of modules per pallet	28
No of pallet	20
No of module, 40h HC container	560

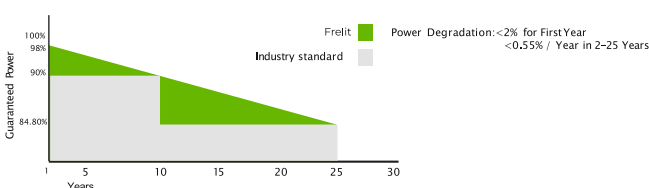
### IV Curve



### PV Curve



### Linear Graph

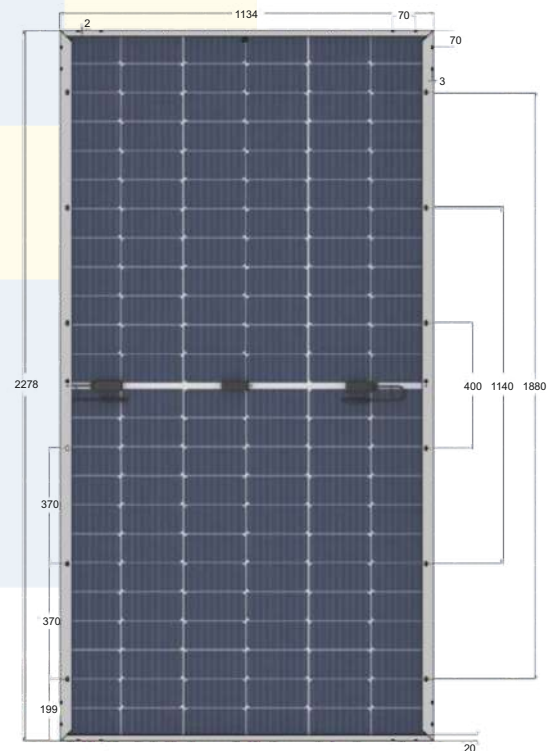


- \*\*Quantity of modules/container may get changed without prior notice. Confirm with our sales representative before placing order.
- For handling & installation instructions, refer to SUNBOND's installation manual available on the company website
- Before placing an order, confirm your requirements with our sales representative
- The electrical data provided here is for reference purposes only
- Dispose of a product as e-waste after the end of its working life
- Refer to FRELIT'S warranty document for terms and conditions
- Due to constant product modifications, FRELIT'S reserves the right to amend the above specifications without prior notice
- Images in the datasheet are for representation purpose only

### MECHANICAL SPECIFICATTON

Solar Cells	144 PCS Monocrystalline silicon (PERC), Multi BB
Encapsulation	Ultra - clear PID free EVA(Ethylene - Vinyl - Acetate)
Backside	UV Protected white Transparent backsheet
Frame	Silver Anodized aluminium alloy
Front Glass	3.2 mm, hightransmission, AR coated tempered glass
Dimensions	(L)2278mm x (W)1134mm x (H)35mm
Weight	28 Kg ± 100 gm
J - box	Ip68 certified, 3 diodes, split junction box
Series Fuse Rating	25A
Cable	Solar cable 400 mm length, 4 mm <sup>2</sup>
Connectors	Mc4 compatible connectors
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C (Type 1)
Surface Load	Snow load 5400 Pa, wind load 2400 Pa.


### Drawing (Measurements are in mm)



### Product Certification

IS 14286, IS/IEC 61730:1,IS/IEC 61730:2,IEC 61701, IEC 62804

### Management System Certifications



ISO 9001\*  
ISO 14001\*  
ISO 45001\*

\*Certification under Process