

◀ BIFACIAL ▶



DESERV[®] EXTREME 144 525 WP - 550 WP



*Module image for representation purpose only



SAFE

- IP68 Junction box
- 10 YEARS 10 years of product warranty
- 25 YEARS 25 Years of power output warranty
- 1500 Vdc



RELIABLE

- Extreme weather resilience
- Windspeed - 2400 Pa, Snowload - 5400 Pa
- Highly reliable anti-reflective coated glass



HIGH PERFORMANCE

- PID resistant
- Superlative performance in low light
- High power density
- Positive power tolerance

World-class products, Made in India

- **Smart:** High module efficiency with 144X half-cut Mono crystalline Bi-facial PERC Solar Cells
- **Modern:** Processed on state-of-the-art technology production lines
- **Dependable:** Use of highest quality raw material coupled with rigorous in-house testing
- **Versatile:** Suitable for Utility, Rooftop, and other general applications

Certifications:

- IEC 61215: 2016 (520-540 Wp)
- IEC 61730: 2016 (520-540 Wp)
- CAN/CSA: 61730 (520 Wp)
- IEC TS 62804-1
- IEC 61853-1 (525 Wp)
- IEC 61853-2 (535 Wp)
- LeTID
- BIS Number R-71018970 (520 Wp-545 Wp)
- IMS Certified Company - ISO 9001: 2015
- OHSAS 45001: 2018
- EMS - ISO 14001: 2015
- Independently audited by SOLARBUYER



RenewSys is the first integrated manufacturer of Solar PV Modules and its key components - Encapsulants (EVA and POE), Backsheets and Solar PV Cells. We have a global presence with offices in India, Mauritius, Nigeria, South Africa, Singapore, UAE, representatives in Europe, USA, Mexico, and an evolving distributor network.

Registered Office: Unit No. 607, 6th Floor, Trade Center, Bandra-Kurla Complex, Bandra East, Mumbai - 400 051, Maharashtra, India.

Factory: Plot No. E-141, Additional Patalganga MIDC Industrial Area, Village - Karade Khurd, Taluka Panvel, District Raigad - 410 206, Maharashtra, India.

Factory: Plot No.6, Survey # 114/P, Srinagar Village, Maheshwaram Mandal, Dist - Rangareddy, Hyderabad - 501 359, Telangana, India.

Performance under standard test conditions (1000w/m², AM 1.5, 25 °C)

DESERV Extreme 144 Bi-Facial Gain @Different Albedo (%)												
	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	525	41.34	12.72	49.21	13.46	20.22	530	41.49	12.79	49.40	13.53	20.41
5%	551.2	41.34	13.33	49.21	14.07	21.23	556.5	41.49	13.41	49.40	14.15	21.43
10%	577.5	41.34	13.97	49.21	14.71	22.24	583.0	41.49	14.05	49.40	14.79	22.45
20%	630.0	41.34	15.24	49.21	15.98	24.26	636.0	41.49	15.33	49.40	16.07	24.49
Front @STC	535	41.68	12.85	49.61	13.61	20.60	540	41.84	12.92	49.82	13.68	20.79
5%	561.7	41.68	13.48	49.61	14.24	21.63	567.0	41.84	13.55	49.82	14.31	21.83
10%	588.5	41.68	14.12	49.61	14.88	22.66	594.0	41.84	14.20	49.82	14.96	22.87
20%	642.0	41.68	15.40	49.61	16.16	24.72	648.0	41.84	15.49	49.82	16.25	24.95
Front @STC	545	41.98	12.99	49.97	13.74	20.99	550	42.15	13.06	50.12	13.81	21.18
5%	572.2	41.98	13.63	49.97	14.38	22.04	577.5	42.15	13.70	50.12	14.45	22.23
10%	599.5	41.98	14.28	49.97	15.03	23.09	605.0	42.15	14.35	50.12	15.10	23.29
20%	654.0	41.98	15.58	49.97	16.33	25.18	660.0	42.15	15.65	50.12	16.40	25.41

NOCT (Wp) at 45 ± 2 °C @800 W/m ²	525	530	535	540	545	550
Pmax (W)	390.72	394.44	398.16	401.88	405.61	409.32
Max. power voltage (Vmp), V	37.81	37.95	38.12	38.27	38.39	38.55
Max. power current (Imp), A	10.35	10.41	10.46	10.52	10.57	10.63
Open circuit voltage (Voc), V	45.76	45.93	46.13	46.32	46.46	46.60
Short circuit current (Isc), A	11.00	11.05	11.12	11.18	11.22	11.28

Bi-faciality factor: 70 ± 5%

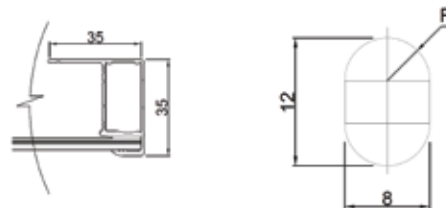
Mechanical Characteristics	
Cable	No. 12 AWG, 4mm ² , (300mm Standard)
PV Connectors	MC4 Compatible
Frame	Anodized Aluminum Alloy
Junction box	IP68 Split junction box with 3 bypass diodes
Glass	3.2mm Thick low iron tempered

Operating Conditions	
Temperature, °C	-40 to +85
Max. system voltage, Vdc	1500
Hail impact velocity, m/sec	23
Max. surface load capacity, Pa	5400
Max. wind speed capacity, Pa	2400
Series fuse rating, A	30

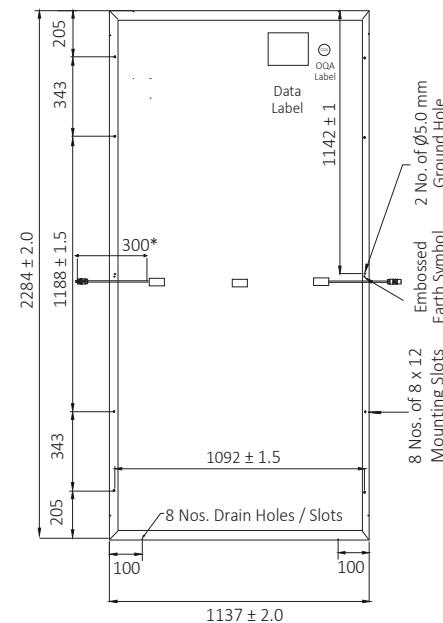
Physical Parameters	
No. of cells	144
Module dimension (mm)	2284 X 1137 (± 2)
Module thickness (mm)	35
Approximate weight (kg)	28.7

Cell Temperature Coefficient	
Open circuit voltage	-0.293 % / °C
Short circuit current	+0.038 % / °C
Peak power	-0.37 % / °C

Frame Cross Section Mounting Hole

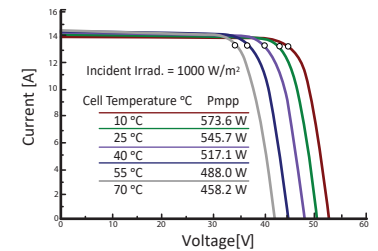


Module Dimension Diagram (mm)

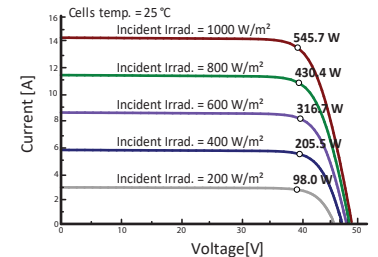


IV Curves

Cell temperature sensitivity chart



Incident irradiance sensitivity chart



Test uncertainty for Pmax ± 3%

Bi-facial gain subject to mounting structure specifications and albedo % of ground

- Please refer to the installation manual for detailed information.

*Due to continuous product updation, specifications may change without notice. Kindly refer to the website for latest information: www.renewsysworld.com