

DESERV[®] EXTREME 144X 565 WP - 610 WP



OUTPUT
Up to 610 Wp



EFFICIENCY
UP TO 23.64%



TEMPERATURE
COEFFICIENT -0.29 %/°C



WARRANTY
12-year of product
30-year of power output

*Module image for representation purpose only **DESERV**[®]

World-class products, Made in India

- **Smart:** High module efficiency with 144X M10R half-cut Mono crystalline Bi-facial TopCon Solar Cell
- **Modern:** Processed on state-of-the-art technology production lines
- **Dependable:** Use of highest quality raw materials coupled with rigorous in-house testing
- **Versatile:** Suitable for Utility, Rooftop, and other general applications

Certifications:

- IMS Certified Company - ISO 9001: 2015
- OHSAS 45001: 2018
- IEC 61730-1:2023 (565 Wp-600 Wp)
- IEC 61215-1:2021 (565 Wp-600 Wp)
- IEC 61215-2:2021 (565 Wp-600 Wp)
- IEC IEC 61853-1:2011 (590 Wp)
- Independently audited by SOLARBUYER
- EMS - ISO 14001: 2015
- BIS Number R-63000760 (565 Wp-600 Wp)
- IEC 61730-2:2023 (565 Wp-600 Wp)
- IEC 61215-1-1:2021 (565 Wp-600 Wp)
- IEC 61853-2:2016 (590 Wp)



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 (%)
Front @STC	565	42.62	13.26	50.91	14.15	21.90
Bi-Facial Gain 5%	595.25	42.62	13.92	50.91	14.81	23.00
Bi-Facial Gain 10%	621.5	42.62	14.58	50.91	15.47	24.09
Bi-Facial Gain 20%	678	42.62	15.91	50.91	16.80	26.28

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	570	42.88	13.30	51.23	14.19	22.09
Bi-Facial Gain 5%	598.5	42.88	13.96	51.23	14.85	23.20
Bi-Facial Gain 10%	627	42.88	14.62	51.23	15.51	24.30
Bi-Facial Gain 20%	684	42.88	15.95	51.23	16.84	26.51

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	605	44.62	13.58	53.30	14.46	23.45
Bi-Facial Gain 5%	635.25	44.62	14.24	53.30	15.12	24.62
Bi-Facial Gain 10%	665.5	44.62	14.91	53.30	15.79	25.80
Bi-Facial Gain 20%	726	44.62	16.27	53.30	17.15	28.14

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	610	44.85	13.61	53.58	14.51	23.64
Bi-Facial Gain 5%	640.5	44.85	14.28	53.58	15.18	24.83
Bi-Facial Gain 10%	671	44.85	14.96	53.58	15.86	26.01
Bi-Facial Gain 20%	732	44.85	16.32	53.58	17.22	28.37

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	575	43.14	13.34	51.55	14.23	22.29
Bi-Facial Gain 5%	603.75	43.14	14.00	51.55	14.89	23.40
Bi-Facial Gain 10%	632.5	43.14	14.66	51.55	15.55	24.52
Bi-Facial Gain 20%	690	43.14	15.99	51.55	16.88	26.75

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	580	43.40	13.38	51.87	14.27	22.48
Bi-Facial Gain 5%	609	43.40	14.03	51.87	14.92	23.61
Bi-Facial Gain 10%	638	43.40	14.70	51.87	15.59	24.73
Bi-Facial Gain 20%	696	43.40	16.04	51.87	16.93	26.98

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	585	43.67	13.41	52.22	14.30	22.68
Bi-Facial Gain 5%	614.25	43.67	14.07	52.22	14.96	23.81
Bi-Facial Gain 10%	643.5	43.67	14.74	52.22	15.63	24.94
Bi-Facial Gain 20%	702	43.67	16.08	52.22	16.97	27.21

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	590	43.93	13.45	52.51	14.34	22.87
Bi-Facial Gain 5%	619.5	43.93	14.10	52.51	14.99	24.01
Bi-Facial Gain 10%	649	43.93	14.77	52.51	15.66	25.16
Bi-Facial Gain 20%	708	43.93	16.12	52.51	17.01	27.44

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	595	44.15	13.49	52.73	14.38	23.06
Bi-Facial Gain 5%	624.75	44.15	14.15	52.73	15.04	24.22
Bi-Facial Gain 10%	654.5	44.15	14.82	52.73	15.71	25.37
Bi-Facial Gain 20%	714	44.15	16.17	52.73	17.06	27.68

	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	600	44.37	13.53	52.95	14.42	23.26
Bi-Facial Gain 5%	630	44.37	14.20	52.95	15.09	24.42
Bi-Facial Gain 10%	660	44.37	14.87	52.95	15.76	25.58
Bi-Facial Gain 20%	720	44.37	16.23	52.95	17.12	27.91

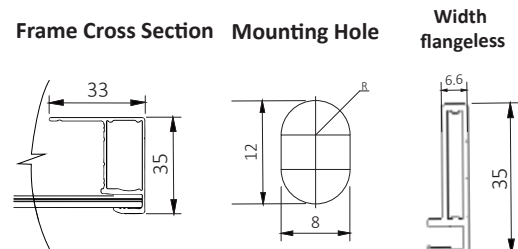
NOCT (Wp) at 45 ± 2 °C @800 W/m ²	565	570	575	580	585	590	595	600	605	610
Pmax (W)	420.49	424.21	427.93	431.65	435.38	439.10	442.82	446.54	450.26	453.98
Max. power voltage (Vmp), V	38.98	39.22	39.45	39.69	39.04	40.18	40.38	40.58	40.81	41.02
Max. power current (Imp), A	10.79	10.83	10.86	10.89	10.91	10.95	10.98	11.01	11.05	11.08
Open circuit voltage (Voc), V	47.34	47.64	47.93	48.23	48.56	48.83	49.03	49.23	49.56	49.82
Short circuit current (Isc), A	11.56	11.59	11.63	11.66	11.68	11.72	11.75	11.78	11.81	11.85

Bi-faciality factor: 80 ±5%

Cell Temperature Coefficient	Bi-Facial
Open circuit voltage	-0.2764 % / °C
Short circuit current	+0.0572 % / °C
Peak power	-0.2915 % / °C

Test uncertainty for Pmax ± 3%

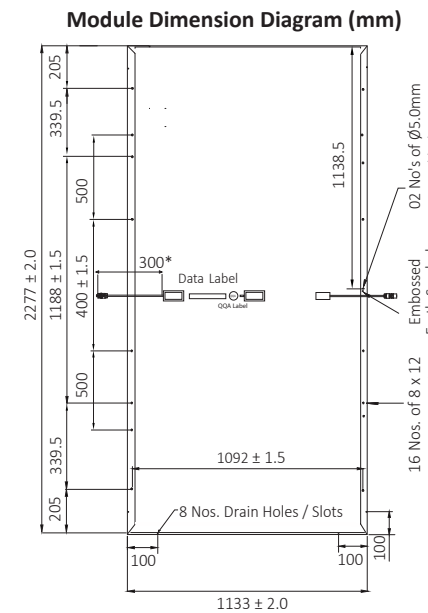
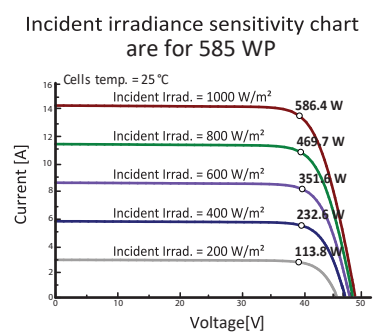
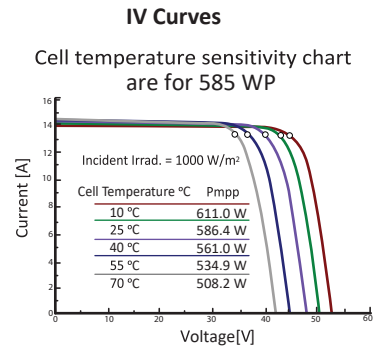
Bi-facial gain subject to mounting structure specifications and albedo % of ground



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)	2277 X 1133 (± 2)
Module thickness (mm)	35
Approximate weight (kg)	31.5

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 (front)	2.0mm AR Coated Semi Tempered Glass
Glass (back)	2.0mm Semi Tempered Glass.



-Please refer to the installation manual for detailed information.

*Standard frame : Width side frame cross section is flange less, Flange is available on request.

*Recycle Responsibly/RenewSys recommends recycling in accordance with local government e-waste notifications.

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