



DESERV[®] EXTREME 108X 415 WP - 450 WP



OUTPUT
Up to 450 Wp



EFFICIENCY
UP TO 22.97%



TEMPERATURE
COEFFICIENT -0.29 %/°C



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

*Module image for representation purpose only



World-class products, Made in India

- **Smart:** High module efficiency with 108X 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:

- IEC 61730-1:2023 (415 Wp-450 Wp)
- IEC 61730-2:2023 (415 Wp-450 Wp)
- IEC 61215-1:2021 (415 Wp-450 Wp)
- IEC 61215-1-1:2021 (415 Wp-450 Wp)
- IEC 61215-2:2021 (415 Wp-450 Wp)
- IEC 61730-1:2023 (415 Wp-450 Wp)
- OHSAS 45001: 2018
- IMS Certified Company - ISO 9001: 2015
- Independently audited by SOLARBUYER
- EMS - ISO 14001: 2015
- BIS Number R-63000760 (415 Wp-450 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 108 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	415	30.68	13.55	37.26	14.19	21.18		420	30.93	13.61	37.57	14.24	21.44
Bi-Facial Gain 5%	435.75	30.678	14.20	37.258	14.84	22.24		441	30.928	14.26	37.568	14.89	22.51
10%	456.5	30.678	14.88	37.258	15.52	23.30		462	30.928	14.94	37.568	15.57	23.58
20%	498	30.678	16.23	37.258	16.87	25.42		504	30.928	16.30	37.568	16.93	25.73
Front @STC	425	31.18	13.65	37.89	14.30	21.70		430	31.43	13.69	38.21	14.35	21.95
Bi-Facial Gain 5%	446.25	31.178	14.31	37.888	14.96	22.75		451.5	31.428	14.37	38.208	15.03	23.05
10%	467.5	31.178	14.99	37.888	15.64	23.86		473	31.428	15.05	38.208	15.71	24.15
20%	510	31.178	16.36	37.888	17.01	26.03		516	31.428	16.42	38.208	17.08	26.34
Front @STC	435	31.69	13.74	38.54	14.41	22.21		440	31.95	13.79	38.87	14.46	22.46
Bi-Facial Gain 5%	456.75	31.688	14.41	38.538	15.08	23.32		462	31.95	14.46	38.87	15.13	23.58
10%	478.5	31.688	15.10	38.538	15.77	24.43		484	31.95	15.55	38.87	15.82	24.71
20%	522	31.688	16.47	38.538	17.14	26.65		528	31.95	16.53	38.87	17.20	26.95
Front @STC	445	32.21	13.84	39.20	14.50	22.72		450	32.45	13.88	39.50	14.54	22.97
Bi-Facial Gain 5%	467.25	32.21	14.51	39.20	15.17	23.85		472.5	32.45	14.56	39.50	15.22	24.12
10%	489.5	32.21	15.20	39.20	15.86	24.99		495	32.45	15.26	39.50	15.92	25.27
20%	534	32.21	16.58	39.20	17.24	27.26		540	32.45	16.64	39.50	17.30	27.57

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

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

- Please refer to the installation manual for detailed information.

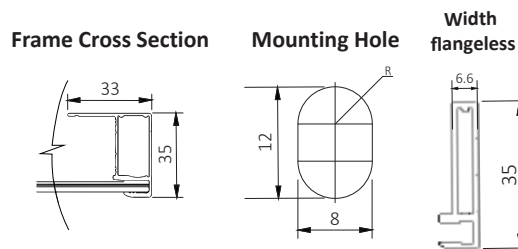
*Due to continuous product updation, specifications may change without notice. Kindly refer to the website for latest information: www.renewsysworld.com

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

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

*Grid printed modules also available(grid is on rear glass)

Physical Parameters	
No. of cells	108
Module dimension (mm)	1729 X 1133 (± 2)
Module thickness (mm)	35
Approximate weight (kg)	24

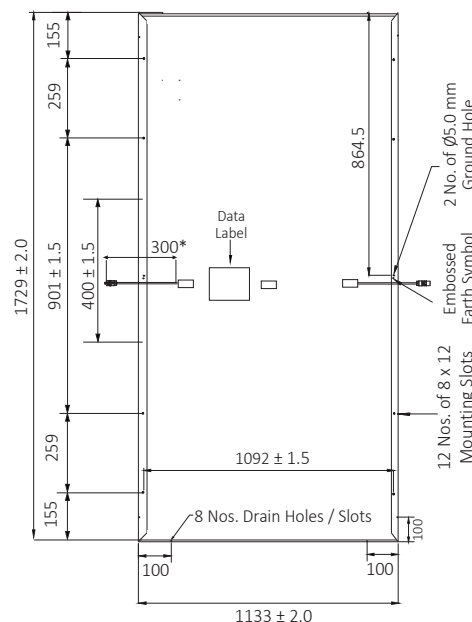


NOCT (Wp) at 45 ± 2 °C @800 W/m ²	415	420	425	430	435	440	445	450
Pmax (W)	308.86	312.58	316.30	320.02	323.74	327.46	331.18	334.90
Max. power voltage (Vmp), V	28.06	28.29	28.51	28.74	28.98	29.22	29.46	29.68
Max. power current (Imp), A	11.03	11.08	11.11	11.14	11.18	11.22	11.26	11.30
Open circuit voltage (Voc), V	34.64	34.93	35.23	35.53	35.83	36.14	36.45	36.73
Short circuit current (Isc), A	11.59	11.63	11.68	11.72	11.77	11.81	11.85	11.88

Bi-faciality factor: 80 ± 5%, Bifaciality factor for grid printed: 75+,-5%

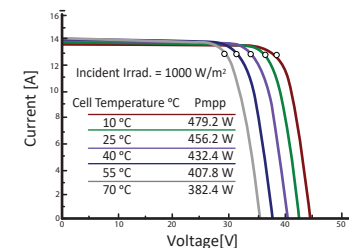
Mechanical Characteristics	
Cable	No. 12 AWG, 4mm ² , (300mm Standard)
PV Connectors	MC4 Compatible
Frame	Anodized Aluminum Alloy
Junction box	IP68 Split junction box with 3 bypass diodes
Glass (front)	2.0mm AR Coated Semi Tempered Glass
Glass (back)	2.0mm Semi Tempered Glass

Module Dimension Diagram (mm)



IV Curves

Cell temperature sensitivity chart



Incident irradiance sensitivity chart

