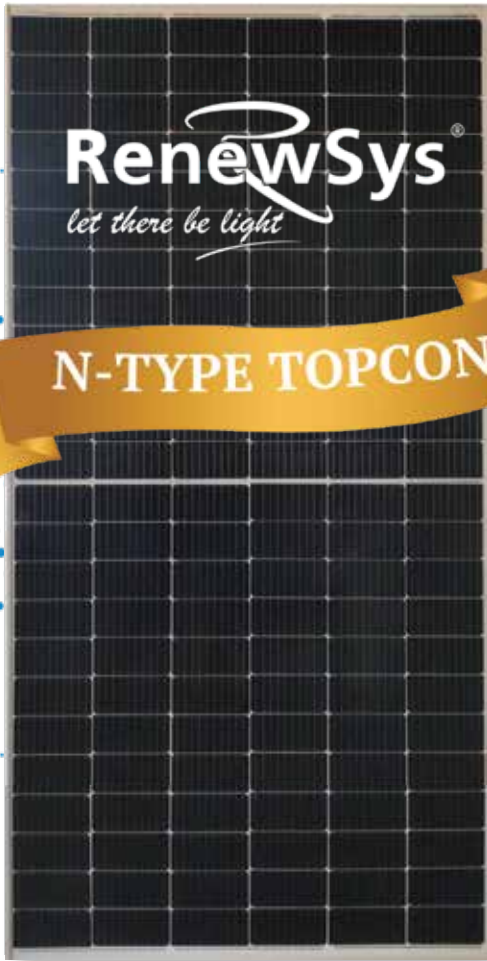


◀ BIFACIAL DUAL GLASS ▶



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



OUTPUT
Up to 450 Wp




EFFICIENCY
UP TO 23.26%



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 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 Compliant
- IMS Certified Company - ISO 9001: 2015
- OHSAS 45001: 2018
- EMS - ISO 14001: 2015
- Independently audited by SOLARBUYER
- 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.

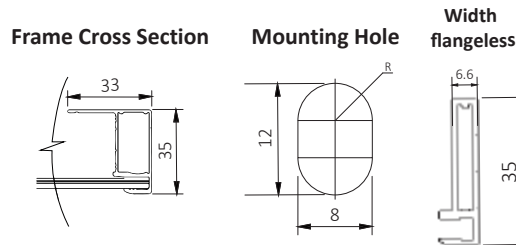
Performance under standard test conditions (1000w/m², AM 1.5, 25 °C)

| DESERV Extreme 108 Bi-Facial Gain @Different Albedo (%) | | | | | | |
|---|------------|---------|---------|---------|---------|----------------|
| | Pm (Wp) | Vmp (V) | Imp (A) | Voc (V) | Isc (A) | Efficiency (%) |
| Front @STC | 415 | 32.31 | 12.88 | 37.74 | 13.28 | 21.18 |
| 5% | 435.75 | 32.31 | 13.49 | 37.74 | 13.89 | 16.78 |
| 10% | 456.5 | 32.31 | 14.13 | 37.74 | 14.53 | 17.58 |
| 20% | 498 | 32.31 | 15.41 | 37.74 | 15.81 | 19.18 |
| Front @STC | 425 | 32.70 | 13.01 | 38.15 | 13.41 | 21.70 |
| 5% | 446.25 | 32.7 | 13.65 | 38.15 | 14.05 | 17.18 |
| 10% | 467.5 | 32.7 | 14.30 | 38.15 | 14.70 | 18.00 |
| 20% | 510 | 32.7 | 15.60 | 38.15 | 16.00 | 19.64 |
| Front @STC | 435 | 33.12 | 13.16 | 38.54 | 13.55 | 22.21 |
| 5% | 456.75 | 33.12 | 13.79 | 38.54 | 14.18 | 17.59 |
| 10% | 478.5 | 33.12 | 14.45 | 38.54 | 14.84 | 18.43 |
| 20% | 522 | 33.12 | 15.76 | 38.54 | 16.15 | 20.10 |
| Front @STC | 445 | 33.48 | 13.28 | 38.93 | 13.69 | 22.72 |
| 5% | 467.25 | 33.48 | 13.96 | 38.93 | 14.37 | 17.99 |
| 10% | 489.5 | 33.48 | 14.62 | 38.93 | 15.03 | 18.85 |
| 20% | 534 | 33.48 | 15.95 | 38.93 | 16.36 | 20.56 |

| 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 | -0.234 % / °C |
| Short circuit current | +0.032 % / °C |
| Peak power | -0.279 % / °C |

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



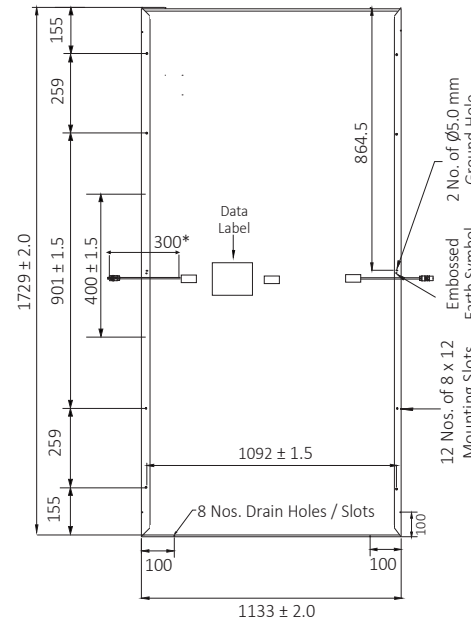
| NOCT (Wp) at 45 ± 2 °C @800 W/m ² | 415 | 420 | 425 | 430 | 435 | 440 | 445 | 550 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Pmax (W) | 308.86 | 312.58 | 316.30 | 320.02 | 323.74 | 327.46 | 331.18 | 334.90 |
| Max. power voltage (Vmp), V | 29.55 | 29.71 | 29.91 | 30.10 | 30.29 | 30.46 | 30.62 | 30.78 |
| Max. power current (Imp), A | 10.48 | 10.53 | 10.59 | 10.65 | 10.71 | 10.76 | 10.81 | 10.86 |
| Open circuit voltage (Voc), V | 35.10 | 35.28 | 35.47 | 35.67 | 35.84 | 36.02 | 36.20 | 36.38 |
| Short circuit current (Isc), A | 10.85 | 10.91 | 10.96 | 11.01 | 11.07 | 11.13 | 11.18 | 11.24 |

Bi-faciality factor: 70 ± 5%

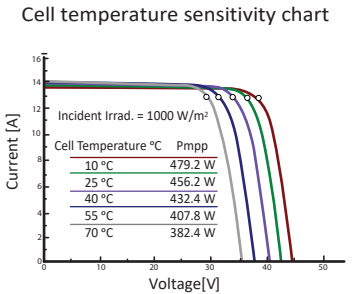
Mechanical Characteristics

| | |
|---------------|---|
| 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 (front) | 2.0mm AR Coated Semi Tempered Glass |
| Glass (back) | 2.0mm Semi Tempered Glass |

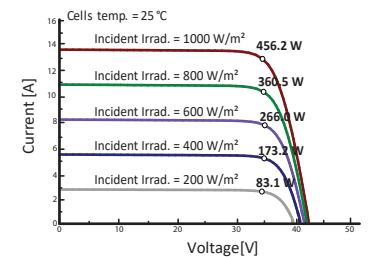
Module Dimension Diagram (mm)



IV Curves



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

*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.