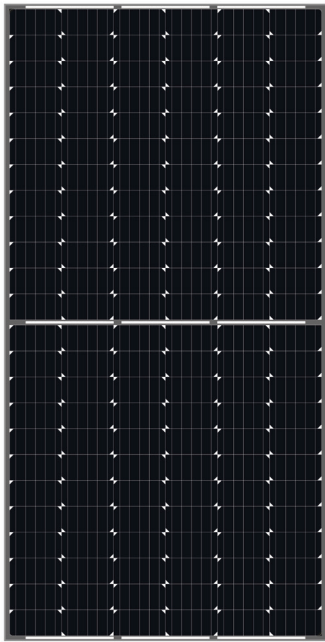


DESERV™ Extreme

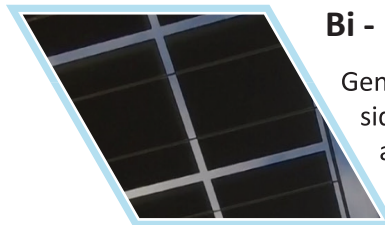
Solar PV Module

DESERV Extreme is an innovation engineered by combining Bi-Facial and Cut Mono PERC PV Cells. The Bi-Faciality is facilitated by a 'Transparent Backsheet' developed in-house.



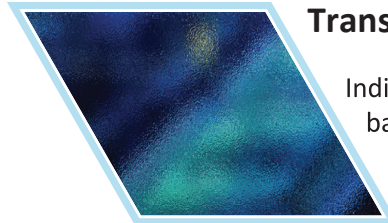
India's most efficient Solar PV Module - 'DESERV Extreme'.

It delivers a front face output of 380 Wp giving up to 646 Wp @70% Albedo.



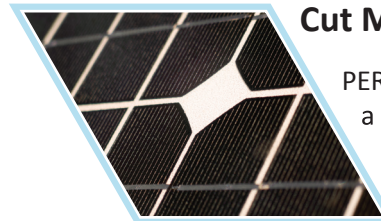
Bi - Facial

Generates power from both sides, hence higher efficiency and power density



Transparent Fluoro Backsheet

India's first transparent fluoro backsheet designed in-house



Cut Mono PERC Cells

PERC Solar PV Cells have a better spectrum operating range and passivation

KEY FEATURES



Made in India



Positive power tolerance



Highly reliable anti- reflective coated glass



High operating currents and voltages



More energy per square meter area



Better performance under shading

IMS Certified Company
(ISO 9001:2015 & OHSAS 18001:2007)

Independently Audited by

 SOLARBUYER

 inter solar award
2018 Finalist

POE Encapsulant
CONSERV[®] E 360

Operating Conditions

Ambient Temperature (°C)	-40 to +85
Maximum System Voltage (Volts)	1000
Hail impact Velocity (m/sec)	23
Maximum Surface Load Capacity (Pa)	5400

Cell Temperature Coefficients

Open Circuit Voltage	-0.29% /°C
Short Circuit Power	+0.05% /°C
Nominal Power	-0.40% /°C

Physical Parameters

No. of Cells	144
Module Dimensions (mm)	1987 x 987 x 40
Module Thickness (mm)	40
Approximate Weight (kg)	23.5

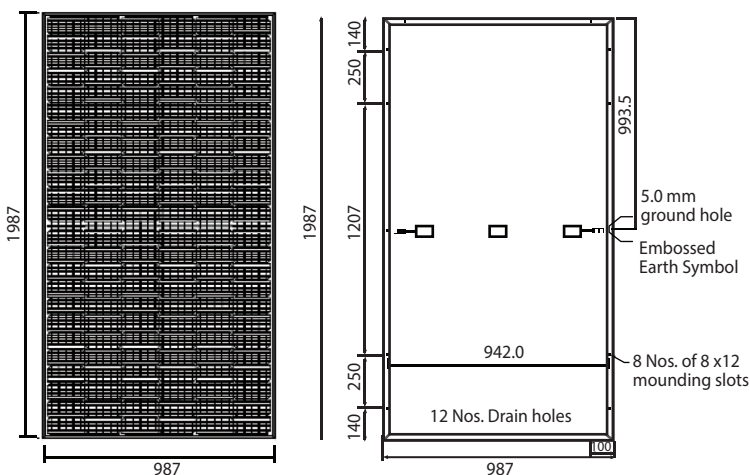
Mechanical Characteristics

Cable	NO. 12 AWG, 4 Sq. mm
PV Connectors	MC4 Compatible
Frame	Anodised Aluminium Alloy
Junction Box	IP 67 Junction Box with 4 Rail
Glass	3.2 mm Thick Low Iron Tempered

NOCT

Pmax (W)	282.81
Voltage Vmax Vmpp(V)	36.03
Current Imax Impp (A)	7.90
Open Circuit Voltage Voc (V)	43.42
Short Circuit Current Isc (A)	8.23

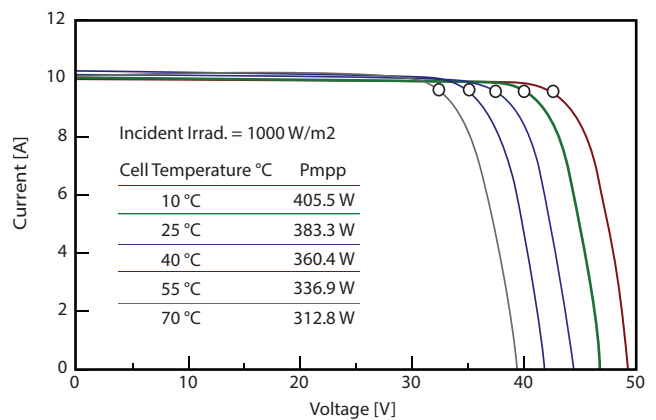
Module dimensions (mm)



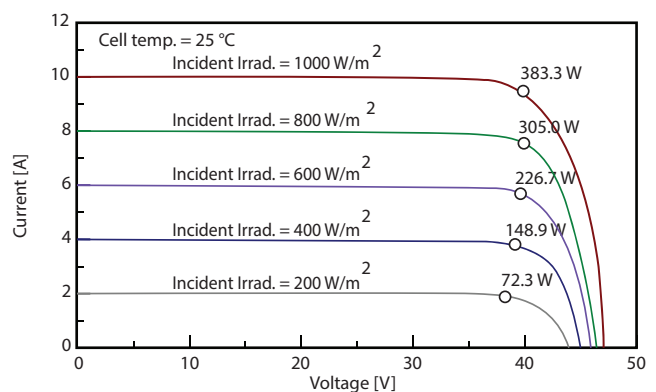
Bi-Facial Gain @ Different Albedo (%)

	P _m (WP)	V _{mp} (V)	I _{mp} (A)	V _{oc} (V)	I _{sc} (A)	Efficiency (%)
Front @ STC	380	39.2	9.70	46.7	10.08	19.32
5%	399	39.2	10.19	46.7	10.58	20.28
10%	418	39.2	10.67	46.7	11.09	21.25
15%	437	39.2	11.16	46.7	11.59	22.22
20%	456	39.2	11.64	46.8	12.10	23.18
25%	475	39.2	12.13	46.8	12.60	24.15
30%	494	39.2	12.61	46.8	13.10	25.11
32%	501	39.2	12.80	46.8	13.31	25.50
35%	513	39.2	13.10	46.8	13.61	26.08
40%	532	39.2	13.58	46.8	14.11	27.05
45%	551	39.2	14.07	46.8	14.62	28.01
50%	570	39.2	14.55	46.8	15.12	28.98
55%	589	39.2	15.04	46.8	15.62	29.95
60%	608	39.2	15.52	46.8	16.13	30.91
65%	627	39.2	16.00	46.8	16.63	31.88
70%	646	39.2	16.49	46.8	17.14	32.84

I-V curves - Cell temperature sensitivity chart



I-V curves - Incident irradiance sensitivity chart



Registered Office: 98, Jolly Maker Chambers No.2, 225 Nariman Point, Mumbai - 400 021, Maharashtra, India.
Tel.: + 91 22 30040500

Factory: Plot No.6, Survey # 114/P, Srinagar Village, Maheshwaram, Mandal, Dist. - Rangareddy, Hyderabad - 501 359, Telangana, India.
Tel.: + 91 40 67303000