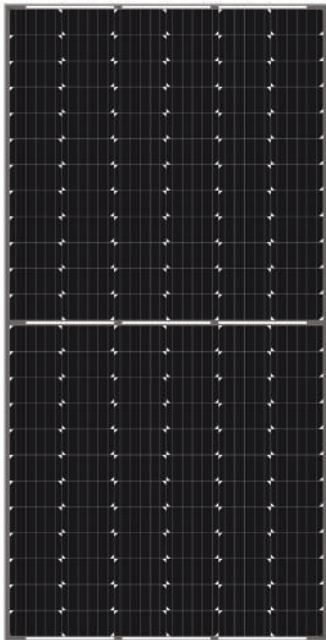


DESERV[™] Extreme

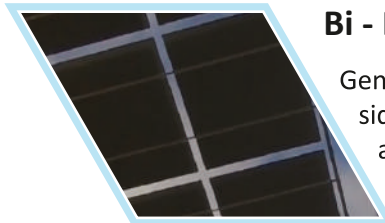
Solar PV Module

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.



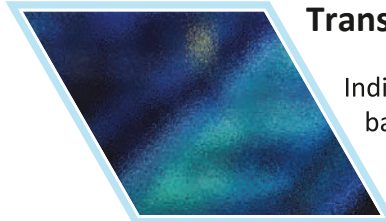
India's most efficient Solar PV Module - 'DESERV Extreme'.

It delivers a front face output of 390 Wp giving up to 663 Wp @70% Albedo.



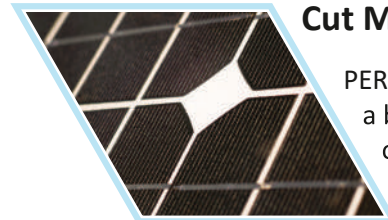
Bi - Facial

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 & EMS - ISO 14001: 2015)

Independently Audited by
 SOLARBUYER

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

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 (±2)
Module Thickness (mm)	40 or 35
Approximate Weight (kg)	23.5 or 23.2

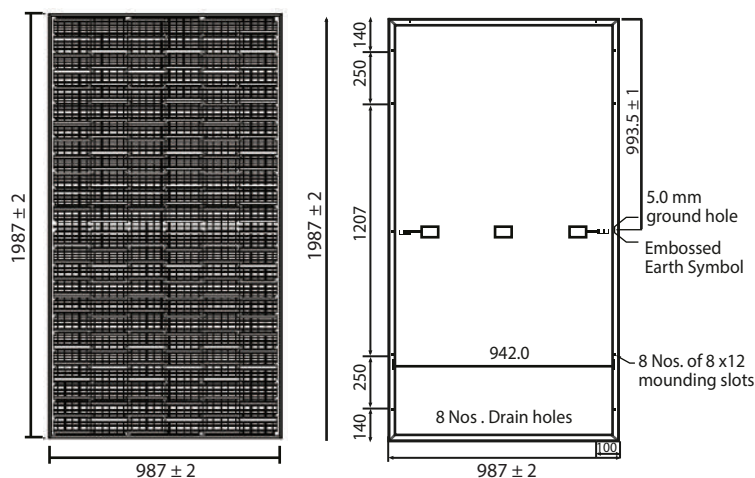
Mechanical Characteristics

Cable	NO. 12 AWG, 4 Sq. mm
PV Connectors	MC4 Compatible
Frame	Anodised Aluminium Alloy
Junction Box	IP67 Junction Box with 4 Rail
Glass	3.2 mm Thick Low Iron Tempered

NOCT (Wp) at 45 ± 2 °C @800 W/m²

Pmax (W)	290.25
Voltage Vmp (V)	36.49
Current Imp (A)	07.96
Open Circuit Voltage Voc (V)	44.97
Short Circuit Current Isc (A)	08.34

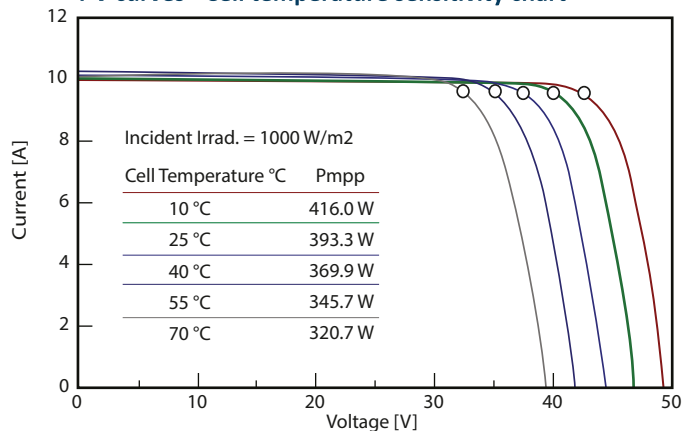
Module dimensions (mm)



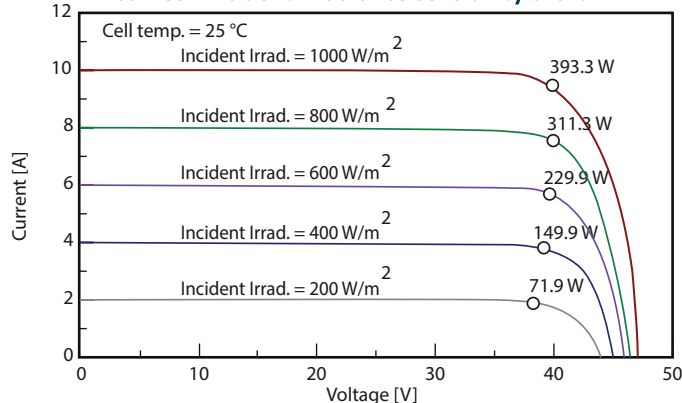
Bi-Facial Gain @Different Albedo (%)

	P _m (Wp)	V _{mp} (V)	I _{mp} (A)	V _{oc} (V)	I _{sc} (A)	Efficiency (%)
Front @ STC	390.0	39.9	9.78	48.36	10.21	19.88
5%	409.5	39.9	10.27	48.36	10.72	20.88
10%	429.0	39.9	10.76	48.36	11.23	21.87
15%	448.5	39.9	11.25	48.36	11.74	22.86
20%	468.0	39.9	11.74	48.46	12.25	23.86
25%	487.5	39.9	12.23	48.46	12.76	24.85
30%	507.0	39.9	12.71	48.46	13.27	25.85
32%	514.8	39.9	12.91	48.46	13.48	26.25
35%	526.5	39.9	13.20	48.46	13.78	26.846
40%	546.0	39.9	13.69	48.46	14.29	27.841
45%	565.5	39.9	14.18	48.46	14.80	28.835
50%	585.0	39.9	14.67	48.46	15.32	29.829
55%	604.5	39.9	15.16	48.46	15.83	30.823
60%	624.0	39.9	15.65	48.46	16.34	31.818
65%	643.5	39.9	16.14	48.46	16.85	32.812
70%	663.0	39.9	16.63	48.46	17.36	33.806

I-V curves - Cell temperature sensitivity chart



I-V curves - Incident irradiance sensitivity chart



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