



ENERGISING THE FUTURE...

SS320P

300Wp-320Wp



- Excellent Power Output with +ve Tolerance upto **4.9Wp**
- 12 Years** Limited Product Warranty
- 25 Years** of Linear Power Guarantee
- High Performance Modules with efficiency up to **16.67%**
- All the modules are **PID** resistant.
- F.S.I** (Flame Spread Index) tested modules first in India
- 100%** EL Tested



- The panels are constructed with Anti Reflective Coating (ARC) toughened low iron, textured high light transmission glass
- Multi layer tedlar and Fast Cure EVA
- Reinforced anodized Aluminium Frame
- Pre-drilled frame for easy mounting
- IP65 & IP67 rated Junction connector
- Solar MC4 compatible connector

APPLICATION



- On-grid system
- BIPV
- Solar Farms
- Standalone (off-grid)
- Systems

CONSTRUCTIONAL CHARACTERISTICS



- Frame
- Glass
- EVA
- Cells
- Back Sheet

CERTIFICATION



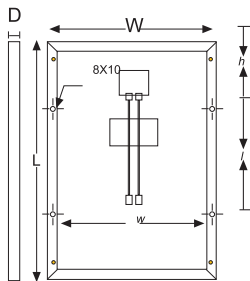
- IEC 61215 (Design Approval)
- IEC 61730 (Safety Approval)
- IEC 61701 (Salt Mist Resistance)
- MNRE (India) Certified
- ISO 9001-2008
- ISO 14001-2004



SS320P

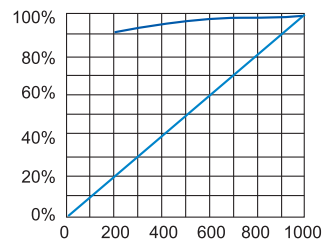
300Wp-320Wp

SPECIFICATIONS	SS300P*	SS305P	SS310P	SS315P	SS320P
	Cell Multi crystalline Solar Cell				
Electrical Characteristics					
Open Circuit Voltage (Voc)	44.46 V	44.60 V	44.71 V	44.86 V	45.01 V
Optimum Operating Voltage (Vmp)	36.14 V	36.30 V	36.40 V	36.49 V	36.56 V
Short Circuit Current (Isc)	8.74 A	8.82 A	8.92 A	9.01 A	9.11 A
Optimum operating Current (Imp)	8.31 A	8.41 A	8.52 A	8.64 A	8.76 A
Power at STC (Pmax)	300 W	305 W	310 W	315 W	320 W
Module Efficiency (η) %	15.63%	15.89%	16.15%	16.41%	16.67%
Cell Conversion Efficiency (%)	17.1%	17.4%	17.6%	17.9%	18.2%
Power Specification measured at STC	Insolation of 1000 W/m ² , AM 1.5, 25°C Cell Temperature				
Operating Conditions	-40°C to +85°C at 85% RH				
Temperature Co-efficient for Voc/°C (β)	-0.34%				
Temperature Co-efficient for Isc/°C (α)	0.05%				
Temperature Co-efficient for power/°C (γ)	-0.43%				
NOCT	45°C ± 2°C				
Safety Class	Fire Rating class-C, Application class-A, Fuse Rating-15A				
Mechanical Characteristics					
Cell Matrix & Cell Size	72Cell (6X12), 156X156mm				
Module Dimension (L) X (W) X (D)	1955X982X42mm				
Mounting Hole (Oblong)	8X10 mm				
Mounting Hole CTC distance - vertical	978 mm				
Mounting Hole from corner (h)	488.5 mm				
Mounting Hole CTC distance - horizontal	944 mm				
Weight	22.1Kg				

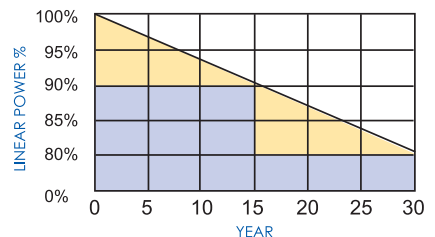


* SUBJECT TO AVAILABILITY OF CELLS

Light-Level Performance for Isc and VOC

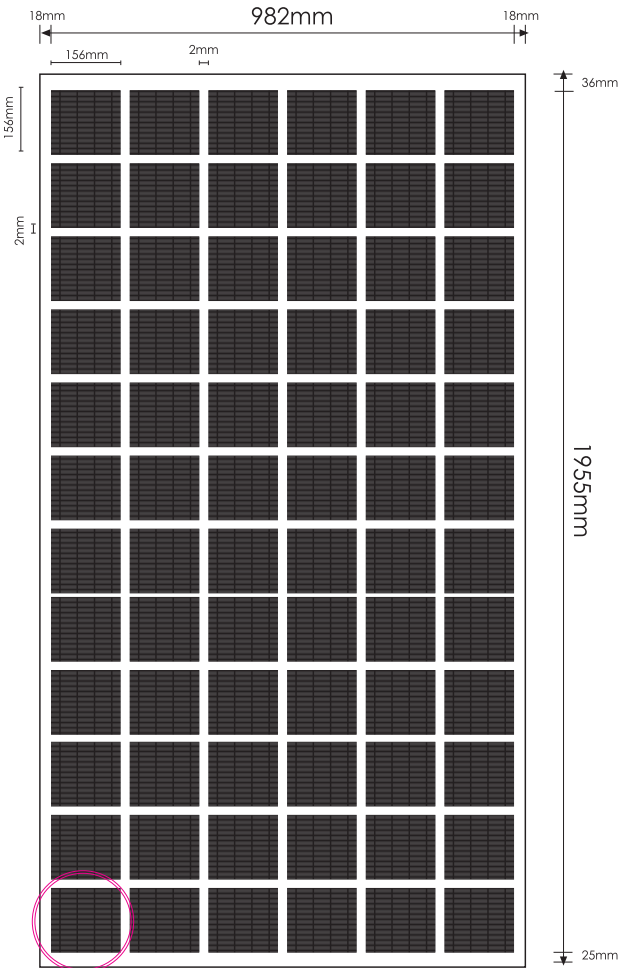


Linear Power Guarantee on Sova Solar PV Modules
97% upto 1 year then @ 0.7%/year





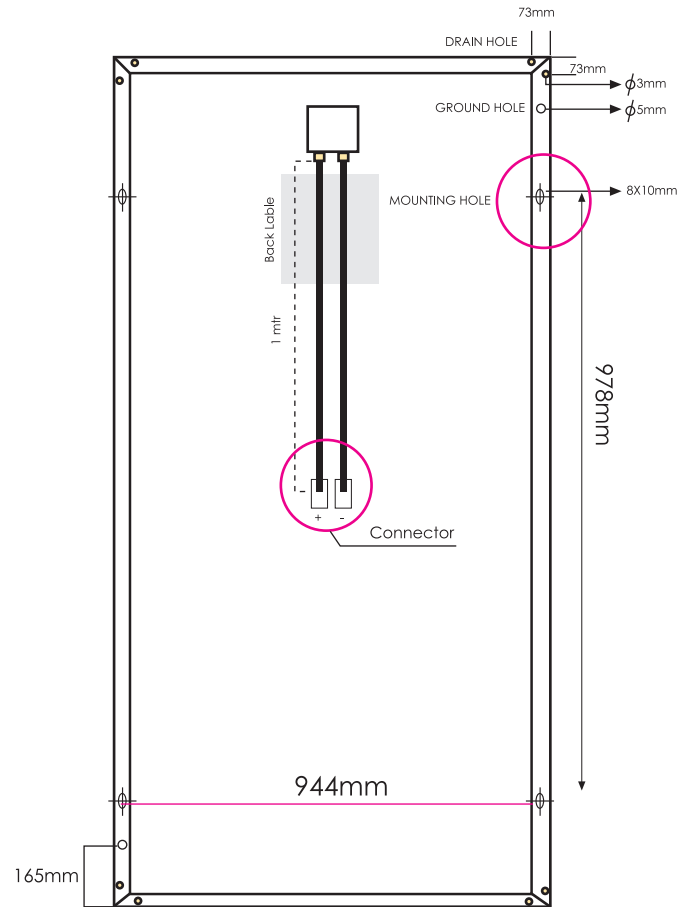
SS320P-DESIGN DETAILS



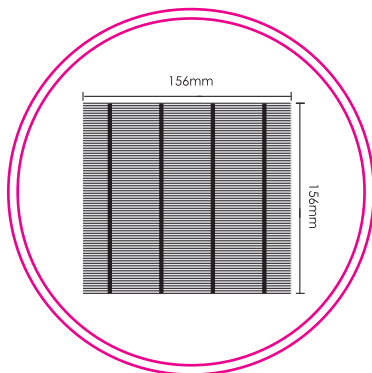
FRONT VIEW



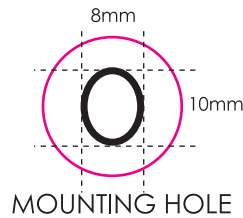
SIDE VIEW



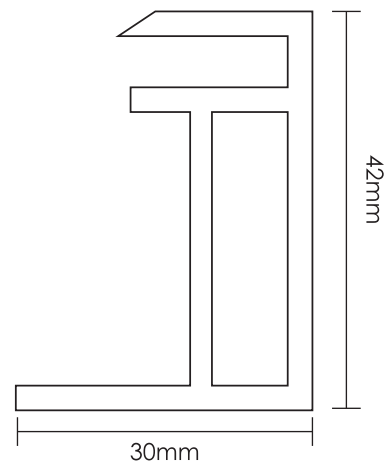
BACK VIEW



SOLAR CELL



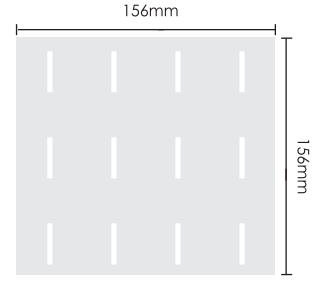
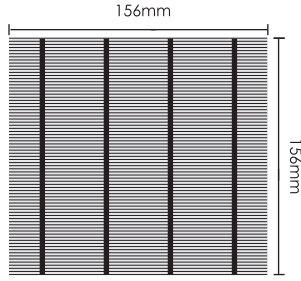
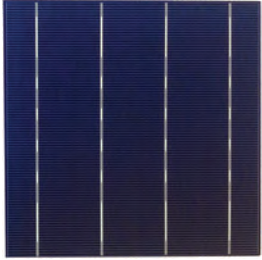
MOUNTING HOLE



FRAME CROSS SECTION



156mm Multi-Crystalline Solar Cell



Eff(%)	Pmpp(W)	I _{mp} (A)	U _{mp} (V)	I _{sc} (A)	U _{oc} (V)
18.4%+	4.48	8.32	0.538	8.82	0.638
18.3%+	4.45	8.29	0.537	8.80	0.637
18.2%+	4.43	8.26	0.536	8.78	0.636
18.1%+	4.40	8.24	0.534	8.75	0.635
18.0%+	4.38	8.22	0.533	8.72	0.634
17.8%+	4.33	8.15	0.531	8.65	0.632
17.7%+	4.31	8.13	0.530	8.61	0.631
17.6%+	4.28	8.09	0.529	8.57	0.630
17.5%+	4.26	8.05	0.529	8.53	0.630
17.4%+	4.23	8.00	0.529	8.50	0.630
17.2%+	4.19	7.93	0.528	8.44	0.629

STC: Irradiance 1000W/, Cell temperature 25°C, AM 1.5G, P_{max} +1.5%, Efficiency ± 0.2%abs

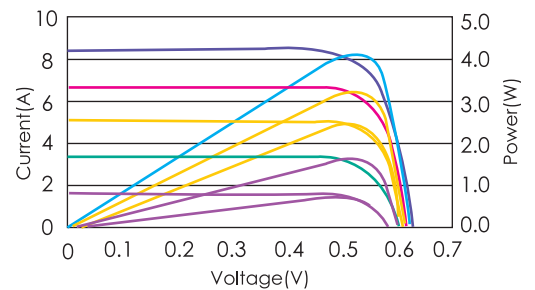
MECHANICAL CHARACTERISTIC

Product	Multi-crystalline silicon solar cell
Dimension	156mmX156mm, tolerance +0.5mm
Thickness	200 ± 20µm, 180 ± 15µm
Front (cathode)	Blue silicon nitride anti-reflection coating 4X1.0mm wide silver bus bars
Back (anode)	Aluminium back surface field 4X2.2mm wide discontinuous silver silver soldering pads

TEMPERATURE COEFFICIENTS

Power	- 0.38%/°C
Current	+0.06%/°C
Voltage	- 0.32%/°C

ELECTRICAL CURVES /IV-Curve



SPECTRUM RESPONSE

