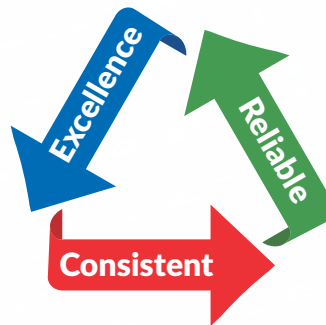
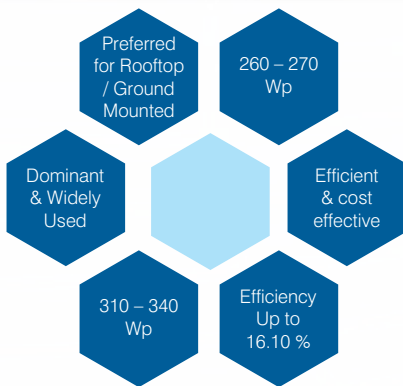


# Topsun Energy Ltd.

260Wp to 340Wp in 60 & 72 cells  
High Performance Crystalline Photovoltaic Modules



## Core Expertise

Topsun Energy Limited has been established in 2007 with a strong back up of its promoters and key partners as well as qualified professionals with high skills, knowledge, expertise and experience in major critical areas. Our progressive journey follows the visionary roadmap of quality and capacity enhancement, global validations and highest product live ratio.



Crystalline photovoltaic modules are manufactured under integrated management system (ISO 9k:ISO 14K : BS 18K) for quality and safety environment.

ISO 50001:2011 (Energy Management System) and ISO 9001:2015, ISO 14001 : 2015 and BS OHSAS 18001 : 2007 certified company have set up state-of-the-art, robotic, clean & dust free PV module.

Modules have successfully passed all the stringent international quality test TUV-IEC, Certisolis-IEC 61215, 62730 (1&2), 61701 (Saltmist), 62804 (PID Free), 62716 (Ammonia test)

MNRE authorized channel partner for Off - Grid as well as On - Grid and rooftop power plant.

This technology adds great value due to its linear degradation and consistent performance all over the operation life. Power to size ratio is very high compared to the other technologies makes it the most suitable choice for roof top and ground mount solar grid tied power generation applications where limited area as well as cost of land in projects matters.



## Features :

- Crystalline module • PID free • Free from Micro cracks • RoHS • AR coated glass for better positive tolerance • Liner degradation as per industry standard • CE Certified
- Best suited for Grid tied applications • IEC – 61215, 61730 (1 & 2) & 61701 (Salt mist)
- RDSO

### Typical Electrical Characteristics at STC

IV parameters are tested at STC (Irradiance of 1000W/m<sup>2</sup>, AM 1.5G and Temperature 25°C)

Model/Type	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)	Eff (%)
260 W	260.00	30.75	8.67	37.35	9.00	15.94
270 W	270.00	31.10	8.73	37.70	9.10	16.56
310 W	310.00	36.78	8.42	44.75	8.89	15.95
315 W	315.00	37.00	8.54	45.00	9.03	16.20
320 W	320.00	37.20	8.73	45.28	9.10	16.46

Electrical Parameters Tolerance : ±3%

Compliance of Simulator readings with an accuracy of class AAA (±2%)

### Typical Electrical Characteristics at NOCT

IV parameters are tested at NOCT (Irradiance of 800W/m<sup>2</sup>, AM 1.5 and Temp at NOCT)

Model/Type	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)
260W	191.35	27.42	6.98	33.97	7.27
270W	194.86	27.73	7.03	34.29	7.35
310 W	222.27	32.80	6.78	40.70	7.18
315 W	226.79	33.00	6.87	40.92	7.30
320 W	233.08	33.17	7.03	41.18	7.35



## Temperature Co-efficients

NOCT	45±2	°C
Pmp	-0.43	%/°C
Isc	0.05	%/°C
Imp	0.03	%/°C
Voc	-0.36	%/°C
Vmp	-0.45	%/°C
Operating Temperature	-40 to +85	°C

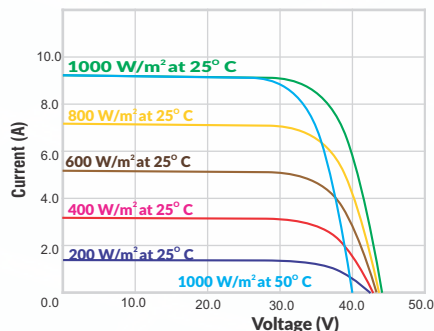
## Packing Configuration

Each Pallet	20 Modules
20 Ft Container	240 Modules
40 Ft Container	480 Modules

## System Design

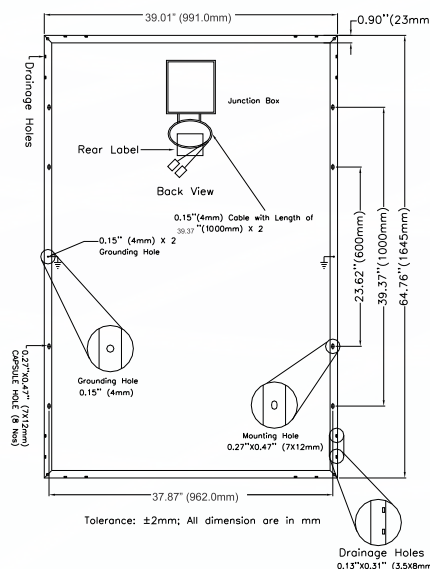
Series Fuse Rating (Recommended): 15A  
 Maximum System Voltage: 1000 VDC  
 Static Load: 5400 Pa (113 Psf)

## Typical IV Curves

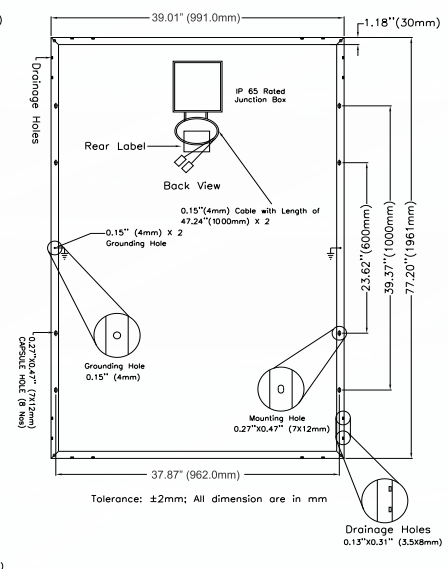


Current/voltage dependence on irradiance and module temperature. These I-V curves indicate the effect of temperature and light intensity on module Performance.

## Dimensions:



Tolerance: ±2mm; All dimension are in mm



Tolerance: ±2mm; All dimension are in mm

NOTE: The data presented may change due to further improvements in the product.

260 / 270 Wp

1645\*991\*35mm

Weight-19.00kg (41.9 Lbs)

310 / 320 Wp

1961\*991\*40mm

Weight-20.50kg (49.6 Lbs)

## Topsun Energy Ltd.

B-101, GIDC, Electronics Zone, Sector-25, Gandhinagar- 382 028, Gujarat, India.

Phone/Fax: +91 79 23288804, 23288805.

Email: marketing@topsunenergy.com, Website: www.topsunenergy.com.

## Our Valued Partner:-