



Future is Secured

Topsun's Crystalline Photovoltaic Modules are manufactured under Integrated Management System (ISO 9K: ISO 14K: BS 18K) for quality and safety environment. Offers high module efficiencies with consistent performance, quality workmanship and antimony free glass material. High power modules precisely manufactured to achieve better module conversion efficiency in the industry. Environmental friendly product confirming to RoHS standards.

### Features :

- Multi Crystalline
- Micro cracks free -100% EL inspected
- AR coated glass for better positive tolerance
- RoHS and CE certified
- Linear degradation as per Industry standard
- Best suited for Grid Tied applications

### Product Certifications :

- IS14286/IEC 61215: 2005 Ed 2.0
- IEC/IS 61730-1: 2013/2004 Ed 1.2/IEC 61730-1: 2007
- IEC/IS 61730-2: 2012/2004 Ed 1.1/IEC 61730-2: 2007
- IEC 61701: 2012 salt mist corrosion test
- IEC 62804: 2015 Potential Induced Degradation

### Organization Certifications :

- ISO 9001; ISO 14001; OHSAS 18001 Certified
- ISO 50001 Certified
- ZED Certified



## 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 (%)	FF (%)
TEL24P330	330.00	36.88	8.63	46.44	09.23	16.98	76.99
TEL24P335	335.00	38.88	8.65	46.44	09.26	17.23	77.90
TEL24P340	340.00	38.88	8.75	46.73	09.36	17.49	77.73
TEL24P345	345.00	38.88	8.90	46.80	09.52	17.75	77.43
TEL24P350	350.00	38.88	9.00	46.87	09.60	18.01	77.79

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>, Temp at NOCT)

Model/Type	(Pmax)	(Vmp)	(Imp)	(Voc)	(Isc)	Eff (%)	FF (%)
TEL24P330	240.82	36.67	6.95	42.23	7.46	12.39	76.44
TEL24P335	241.38	34.67	6.96	42.23	7.48	12.42	76.41
TEL24P340	244.17	36.67	7.04	42.50	7.56	12.56	75.99
TEL24P345	248.35	34.67	7.16	42.56	7.69	12.77	75.88
TEL24P350	251.14	34.67	7.24	42.63	7.76	12.92	75.91

## System Design

Series Fuse Rating (Recommended): 15 A

Maximum System Voltage: 1000 VDC

Static Load: 5400 Pa (113 Psf)

Module Dimension: 1961 x 991 x 35 mm (Area: 1.94 Sq.mtr)

Module Weight: 22.00 kg (48.5 Lbs)

Fire Rating : Class C

By Pass Diode Rating : 20A

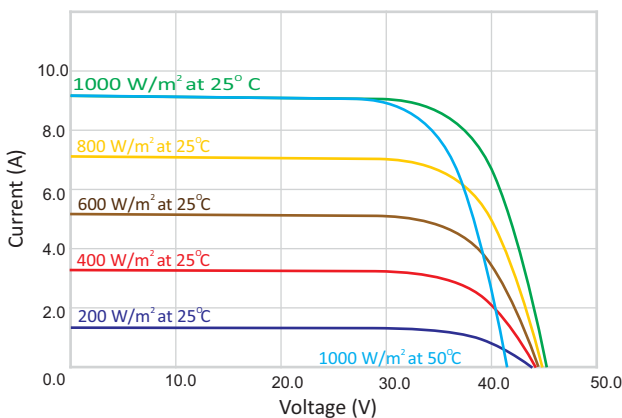
## Temperature Co-efficients

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

## Packing Configuration

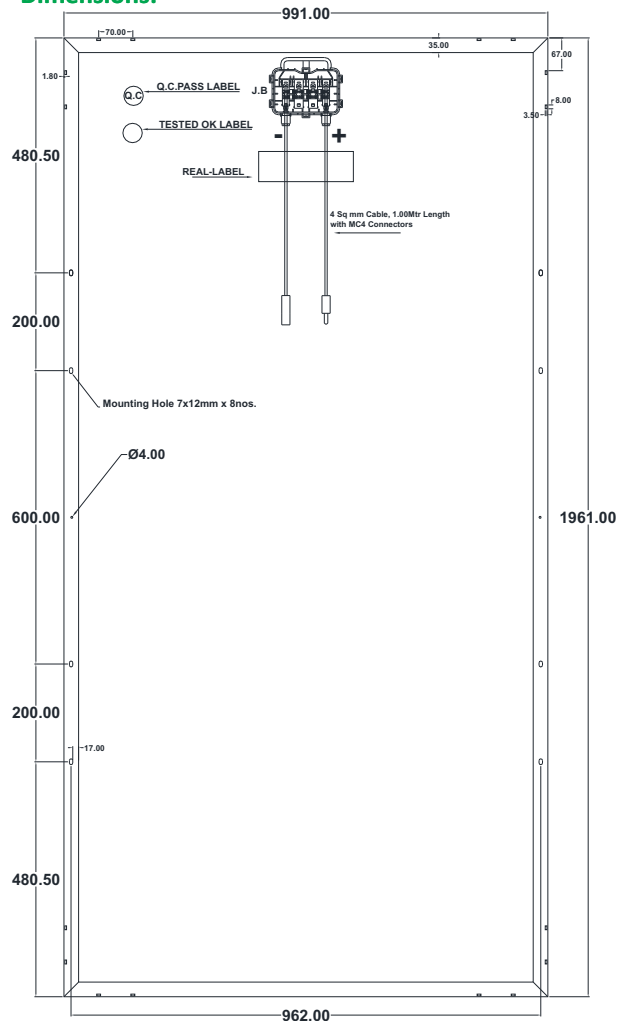
Each Pallet	30 Modules
20 Ft Container	300 Modules
40 Ft /40Ft HC Container	660 Modules

## 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.

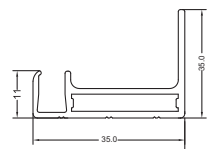
## Dimensions:



Tolerance: ± 2mm  
All Dimensions are in mm



Refer Installation, Operation & Maintenance manual before use and operation of the product



NOTE: Data within this document may change without any prior notice due to continual improvements. you are advised to get latest information before making any final decision on listed products.

## 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.