Nirmitee Solar

SOLAR PV MODULES & EPC

AMERA 54 SERIES

POLY CRYSTALINE MODULE

RECOMNDED FOR  RESIDENTIAL  COMMERCIAL  UTILITY SCALE GROUND MOUNTED

KEY FEATURES

- **Plus power tolerance (upto +3%) output guaranteed.**
- **Excellent module conversion efficiency up o 16.22%.**
- **Designed for high voltage systems of upto 1500VDC, saving on BoS Cost**
- **Module Certified By TUV for following**
  - **For Snow Zone III , withstand high level of wind loads (2400 Pa) & Snow loads (5400 Pa)**
  - **For PID Test. No Potential Induced Degradation caused by High Voltage Stress .**
  - **Salt mist Corrosion Test**
  - **Ammonia Corrosion Test**
- **Multi stages EL inspection (Pre & Post Lamination) to ensure micro crack-free modules .**
- **Junction Box & bypass diodes guarantee the module free from over heating & hot-spot effects**
- **Modules excellent performance under low light environment (morning , evening & cloudy days) creates better KWH /KW ratio & produce average more electricity in the field .**

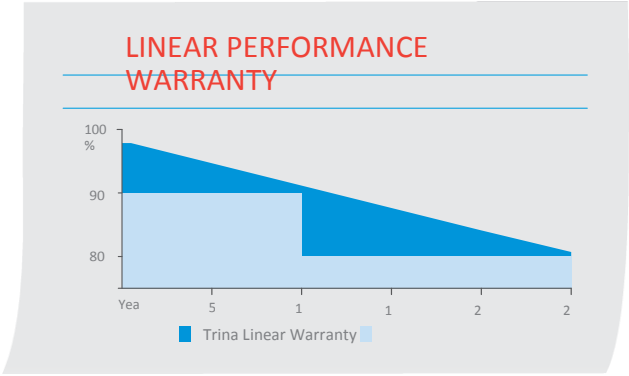
Reliable Quality

- Powerful and stable: manufactured as per stringent quality norms
- 25 years output warranty.
- Certified from TUV SAAR & UL India.
- IP67 rated junction box for long-term weather endurance.
- 4BB design module improves reliability & module conversion efficiency.
- Certified for hail resistance.
- Manufactured in an ISO 9001:2015, ISO 14001:2015 certified facility .
- Manufactured using highest grade raw materials from reputed international suppliers

Guaranteed Performance

10 years Manufacturing workmanship Warranty

25 years Linear Power output warranty



Electrical Parameter at STC

Model Type	NS225P	NS230P	NS235P	NS240P	
Capacity range- Pmax(Wp)	225	230	235	240	
Power Tolerance(%)	0~3	0~3	0~3	0~3	
module efficiency (%)	15.2	15.54	15.88	16.22	
Rated Voltage - Vmp (V)	27.6	27.7	27.8	27.9	
Rated Current -Imp (A)	8.16	8.31	8.46	8.61	
Open Circuit Voltage -Voc (V)	33.6	33.8	34	34.1	
Short Circuit Current -Isc (A)	8.65	8.8	8.95	9.05	

 # Under Standard Test Condions (STC) of irradiance of 1000W/m², spectrum AM1.5 and cell temperature of 25°C

Temperature coefficients (TC)

Temperature Coefficient (Voc)	-0.33%/°C
Temperature Coefficient (Isc)	0.034%/°C
Temperature Coefficient (Pmax)	-0.42%/°C

Permissible Operating Conditions

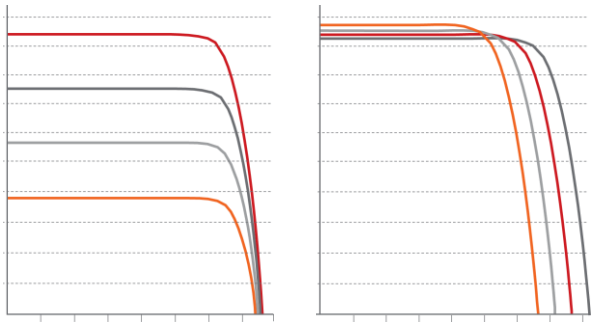
Temperature range	-40°Cto+85°C
Maximum system voltage	1500 VDC
NOCT	45±2°C
Maximum surface load	Tested upto 5400Pa according to IEC61215
Hail resistance	Maximum diameter of 25mm with velocity 23m/s

Mechanical Specification

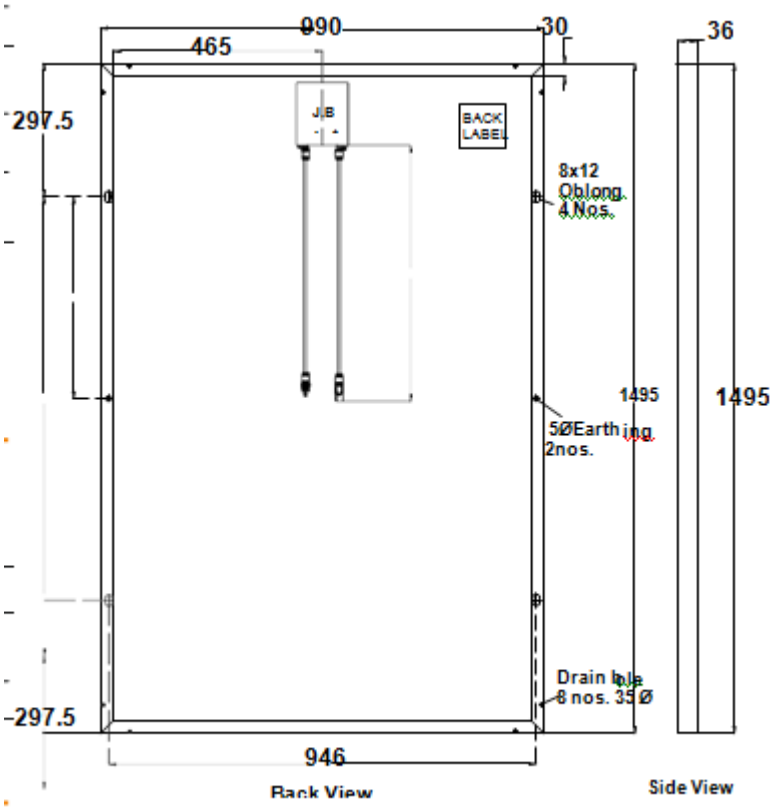
Solar Cell	54 pcs Poly crystalline Silicon (156mm x 156mm, 0~+1mm) , 4BB ,PID free
Cell encapsulation	Ultra-clear PID free EVA(Ethylene-Vinyl-Acetate)
Backsheet	UV protected reflective backsheet
Frame	Silver Anodised Aluminum Alloy
Front glass	3.2 mm, High transmission, AR Coated Tempered Glass
Dimensions (LxWxH)	1495mm x 990mm x 36mm
Weight	16.0 kgs
Juncon box	IP67 cerfied , 4-rail, 3 diodes juncon box
Cables & Connectors	Solar cables 1000mm length, 4mm$_2$, MC4 compaitable connectors
ApplicaonClass	ClassA
Electrical Safety	Class II
Fire Safety	ClassC (Type1)

Packing Information

Each Module in a Inner carton & 2 Modules in a Master Carton



1000w/m²	5°C
800w/m²	25°C
600w/m²	45°C
400w/m²	65°C



All dimensions are in mm