SUN FOR EVER

MAKE USE OF IT.. GO SOLAR...

Nirmitee
Solar

SOLAR PV MODULES & EPC

nirmiteesolar.com

ABOUT US

Nirmitee Solar has expertise in the PV module manufacturing arena and comprehensive EPC solution provider in the Western India region. We have an ultra-modern, fully automatic, State-of-the-art, advanced technology driven, clean & dust free robotic world class Solar PV module manufacturing facility with an installed capacity of 50 MW and plans to expand upto 300MW in coming future. To produce best quality modules with highest efficiency, we have advanced and high quality production machinery from globally acclaimed Tier 1 companies like Topray Solar. Our management team has a proven track record of success in business, with decades of business experience drawn from our parent group of companies that have been around since 2000.

We manufacture Solar modules in the range of 3Wp to 340Wp using world's best premier quality raw materials. Our modules have successfully passed all the stringent quality tests at SGS-TUV SAAR GmbH , one of the reputed German Laboratories. Our modules are certified for IEC61215 and IEC61730 Part-1 & 2 , IEC61701. Our modules are marked for "CE" certification and tested at ERTL as per STQC/MNRE standards for projects initiated under the policy of Government of India. We are also ISO 9001-2015 and 14001-2015 certified company. Nirmitee Solar is well known for its commitment towards excellence, innovation, technology, skill and dedication. This will translate into high quality, reliability and longevity of the solar modules produced.

OUR HISTORY

Nirmitee Electricals - (An ISO 9001 : 2000 Company)
We would like to introduce our-self as one of the leading in the field of "Electrical Project Planning & Execution" (H.T and L.T) works with strong foundation since last 25 years. We Execute Turnkey Electrification Project for new Industrial plants, Commercial Plaza, Malls & Hospitals. We also provide Detail Engineering Services for new upcoming projects, as well as suggest Modernization schemes for existing plants.

We have established ultra modern a state-of-art manufacturing set up, well equipped with CNC Turret Punching Press machine (TPPM), CNC Bending machine Make -AMADA – JAPAN Fabrication, Press Shop facility and a Semi-Automatic/ Conveyor Powder Coating Plant with nine tank pre-treatment (Hot Phosphating) process.

OUR VISION

Nirmitee Solar is committed to enabling solar everywhere and bringing the power of the sun to people in the most efficient and cost effective way possible. Be a trusted partner for people & society, and improve quality of life by providing sustainable solutions. Improve quality of life of people and positively impact society .Undertake sustainable growth by building world class infrastructure

OUR MISSION

Contribute to establishing solar energy as a primary source for all commercial and residential properties throughout the world. This is an opportunity for each community to use a clean renewable energy as their main source of electricity. We don't need to rely on unsustainable fossil fuels any longer. Now is the time to thrive on the planet's abundant supply of renewable energy. This will not only transform our economy but will ensure a brighter future for the next generations.

NIRMITEE PV MODULES

QUALITY – Nirmitee PV modules are manufactured with highest International standards and certified by leading institutions and research institutes.

RELIABILITY – Great quality is backed by our sustainable company growth. At Nirmitee we believe in providing quality that lasts. With a standard 25 years performance guarantee and 10 years product warranty – our PV modules are reliable, durable and robust.

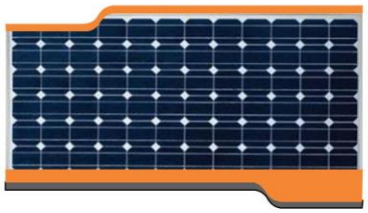
POWER – Our PV modules constantly have a positive power tolerance as we use cells of highest quality while maintaining strict vigilance on manufacturing standards.

EFFICIENCY – With continuous technology development and strong emphasis on research, we have been able to manufacture cells with 4 & 5 bus bars – thereby helping us achieve high module performance.

SOLID – Our PV modules are built for the long term performances. In this way we test them in conditions harsher than found in nature. Our modules are resistant to salt mist and corrosion ammonia and can bear mechanical loads upto 5400Pa.

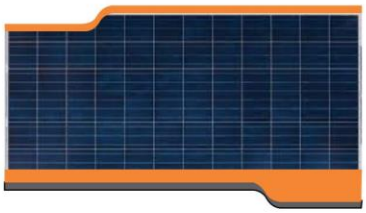
FLEXIBILITY – With our state-of-the-art manufacturing facility and latest technology we can offer modules with different sizes and ratings-everything to suit your needs.

OUR PRODUCTS



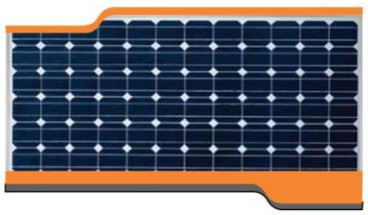
AMEYRA 72 SERIES

72-Cell Monocrystalline
Solar Module
310wp-340wp



AMEYRA 72 SERIES

72-Cell Polycrystalline
Solar Module
300wp-330wp

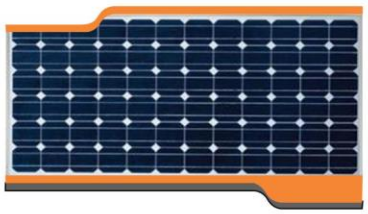


AMEYRA 60 SERIES

60-Cell Monocrystalline
Solar Module
260wp-280wp

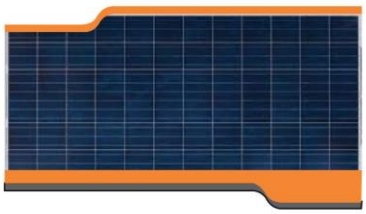
AMEYRA 60 MODULE

60-Cell Polycrystalline
Solar Module
250wp-270wp



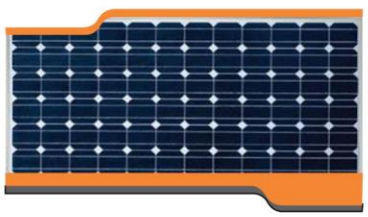
AMEYRA 54 SERIES

54-Cell Monocrystalline
Solar Module
225wp-245wp



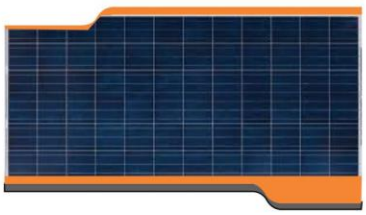
AMEYRA 54 SERIES

54-Cell Polycrystalline
Solar Module
225wp-240wp



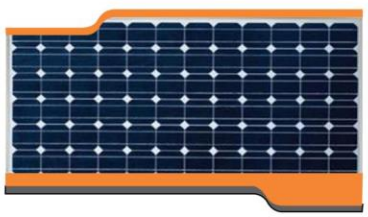
AMEYRA 48 SERIES

48-Cell Monocrystalline
Solar module
200wp-210wp



AMEYRA 48 SERIES

48-Cell Polycrystalline
Solar module
200wp-210wp



AMEYRA 36 SERIES

36-Cell Monocrystalline
Solar module
150wp-170wp

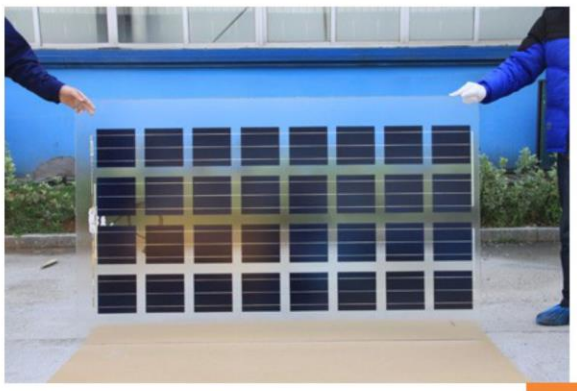
AMEYRA 36 SERIES

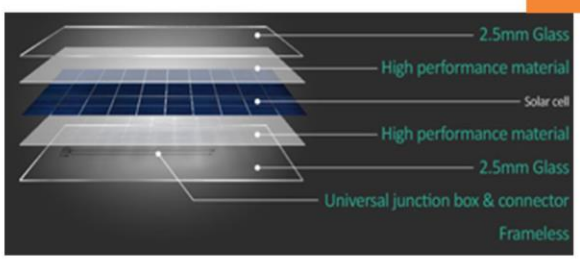
36-Cell Polycrystalline
Solar module
150wp-160wp

CERTIFICATION:

OUR NEW ARRIVALS

Bifacial / Double Glass Panels





In case of Single faced Solar Panel , in desert sands , snowy surfaces as well as on water , a considerable portion of Sunlight is reflected back and a significant portion of sunlight is lost . Today, there are solar panels that can absorb solar radiation from both the sides. The construction is such that the conventional backsheet and glass structure is replaced by a frameless panel with tempered glass on both sides. Due to this, the industry has coined different names for such modules – **bifacial or glass-glass or dual glass modules.** These modules made of thickness of 2.5mm Glass . The two light absorbing surfaces mean that the electricity generation is significantly increased in comparison to conventional solar panels when the same number of panels are used .

Flexible Solar Panels

The flexible Reliable and foldable panels can be used for architectural standing seam metal roofs, where the module can be adhered directly to the metal roof surface in between the raised seams. The result is an aesthetically pleasing solar roof that doesn't have obtrusive racks mounted to the outside of the metal seams that detract from a clean, streamlined look.

The integrated flexible solar panel is perfectly curved along the roof of the car.

Flexible thin-film solar modules can also be used in many other applications, such as floating solar reservoir covers and large canal waterway solar covers. These covers help reduce water losses due to evaporation, and once solar modules are installed they can also provide renewable energy to process and move water. Floating covers built with flexible polymer membranes and lightweight support structures provide a low-cost option compared to using heavy glass solar modules with large structural supports and flotation components.

Black Solar Panels

The integrated Black solar panel are preferably used for BIPV & aesthetical rooftop application ..

Nirmitee Solar

SOLAR PV MODULES & EPC

RECOMNDED FOR RESIDENTIAL COMMERCIAL UTILITY SCALE GROUND MOUNTED

KEY FEATURES

- **Plus power tolerance (upto +3%) output guaranteed.**
- **Excellent module conversion efficiency.**
- **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)
  - Potential Induced Degradation Test.
  - Salt mist Corrosion Test
  - Ammonia Corrosion Test
  - Hail Resistance
- **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**

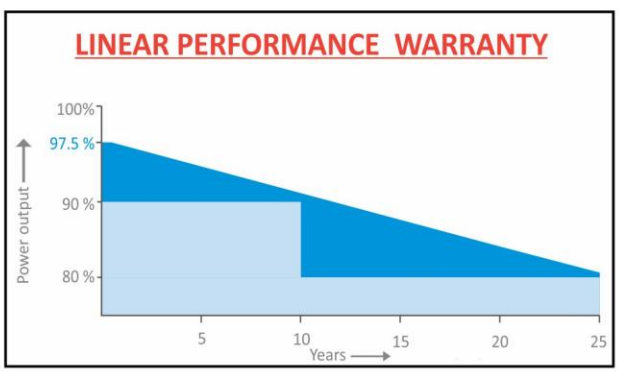
RELIABLE QUALITY

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

Guaranteed Performance

10 Years — Manufacturing workmanship Warranty

25 Years — Linear Power output warranty

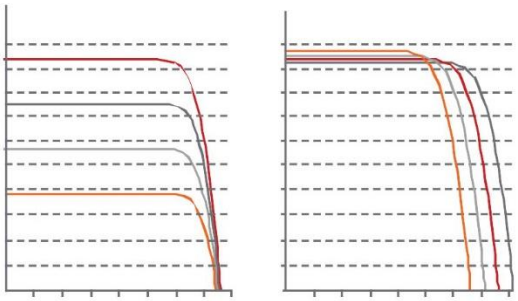


AMEYRA 72 CELL SERIES

Electrical Parameter at STC

Model Type	NS300P	NS305P	NS310P	NS315P	NS320P	NS325P
Capacity range- Pmax(Wp)	300	305	310	315	320	325
Power Tolerance(%)	0~3	0~3	0~3	0~3	0~3	0~3
module efficiency (%)	15.5	15.76	16.02	16.28	16.53	16.79
Rated Voltage - Vmp (V)	36.6	36.8	36.9	37	37.1	37.2
Rated Current -Imp (A)	8.2	8.3	8.42	8.52	8.63	8.74
Open Circuit Voltage -Voc (V)	45.2	45.4	45.7	46	46.2	46.4
Short Circuit Current -Isc (A)	8.6	8.7	8.8	8.9	9	9.1

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



Electrical Parameter at NOCT

Model Type	NS300P	NS305P	NS310P	NS315P	NS320P	NS325P
Capacity Pmax (Wp)	216.01	219.61	223.21	226.81	230.41	234.01
Rated Voltage - Vmp (V)	33.41	33.6	33.69	33.78	33.87	33.96
Rated Current -Imp (A)	6.46	6.54	6.64	6.72	6.8	6.89
Open Circuit Voltage -Voc (V)	41.57	41.75	42.03	42.31	42.49	42.67
Short Circuit Current -Isc (A)	6.84	6.92	7	7.08	7.16	7.24

 # NOCT irradiance of 800W/m², ambient temperature of 20°C Wind speed 1m/sec

Temperature coefficients (TC)

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

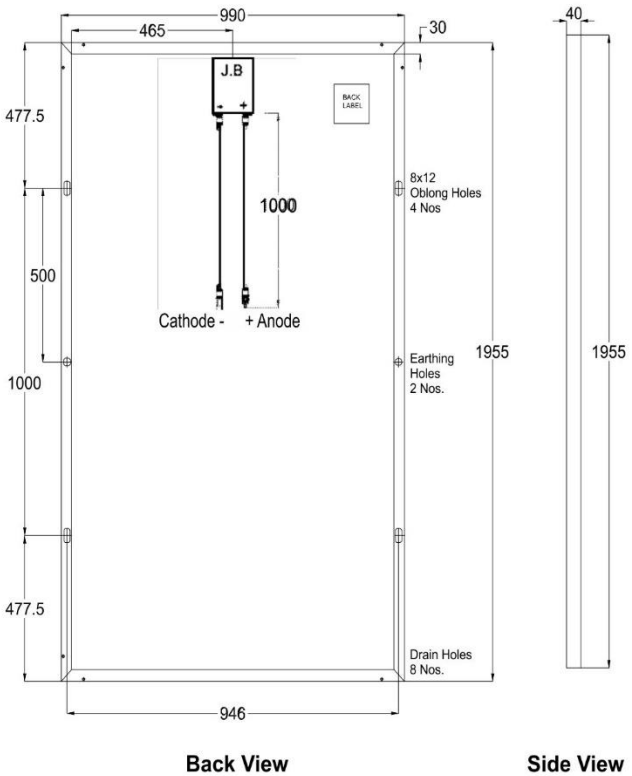
Permissible Operating Conditions

Temperature range	-40°C to +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 Specififfication

Solar Cell	72 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)	1955mm x 990mm x 40mm
Weight	22.0kgs
Junction box	IP67 certified , 4-rail, 3 diodes Junction box
Cables & Connectors	Solar cables 1000mm length, 4mm², MC4 compaitable connectors
ApplicaonClass	Class A
Electrical Safety	Class II
Fire Safety	ClassC (Type1)

Mechanical Drawing



Back View **Side View**

Packing Information

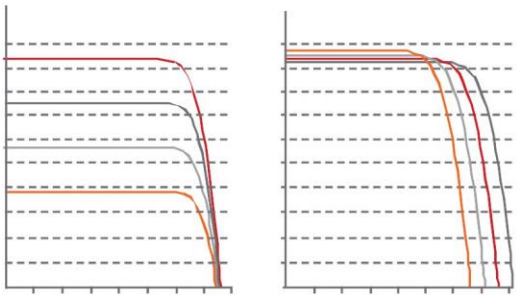
Container	20'GP	40 'HC
Pallets/container	10	24
Modules/container	250	600

AMEYRA 60 CELL SERIES

Electrical Parameter at STC

Model Type	NS250P	NS255P	NS260P	NS265P	NS270P
Capacity range- Pmax(Wp)	250	255	260	265	270
Power Tolerance(%)	0~3	0~3	0~3	0~3	0~3
module efficiency (%)	15.37	15.71	16.01	16.32	16.63
Rated Voltage - Vmp (V)	30.4	30.2	30.3	30.5	30.8
Rated Current -Imp (A)	8.22	8.46	8.59	8.69	8.77
Open Circuit Voltage -Voc (V)	37.3	37.9	38.2	38.4	38.55
Short Circuit Current -Isc (A)	8.74	8.7	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



Electrical Parameter at NOCT

Model Type	NS250P	NS255P	NS260P	NS265P	NS270P
Capacity Pmax (Wp)	180.05	183.61	187.21	190.81	201.61
Rated Voltage - Vmp (V)	27.45	27.57	27.66	27.84	28.12
Rated Current -Imp (A)	6.57	6.67	6.77	6.85	6.91
Open Circuit Voltage -Voc (V)	34.48	34.86	35.13	35.32	35.45
Short Circuit Current -Isc (A)	6.84	6.92	7	7.12	7.2

 # NOCT irraiance of 800W/m², ambient temperature of 20°C Wind speed 1m/sec

Temperature coefficients (TC)

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

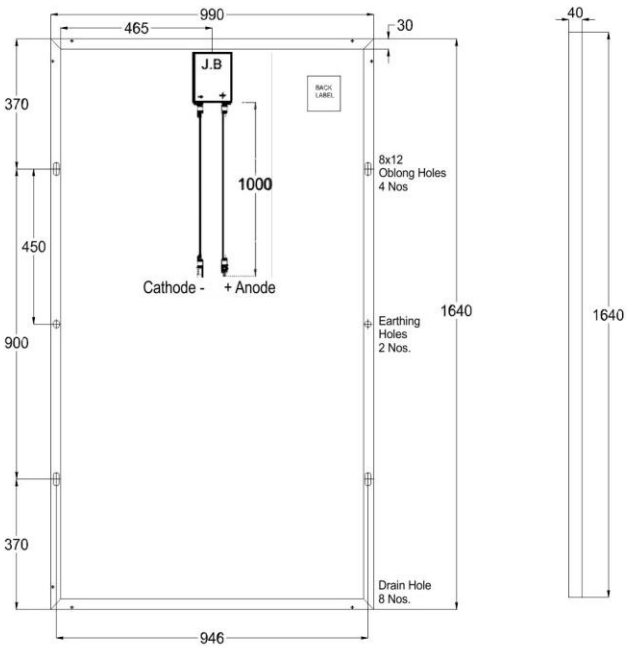
Permissible Operating Conditions

Temperature range	-40°C to +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 Speciffication

Solar Cell	60 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)	1640mm x 990mm x 40mm
Weight	18.3kgs
Junction box	IP67 certified , 4-rail, 3 diodes Junction box
Cables & Connectors	Solar cables 1000mm length, 4mm², MC4 compaitable connectors
ApplicaonClass	Class A
Electrical Safety	Class II
Fire Safety	ClassC (Type1)

Mechanical Drawing



Back View **Side View**

Packing Information

Container	20'GP	40 'HC
Pallets/container	10	28
Modules/container	290	812

COMPLETE EPC SOLUTION

Step 1

CONSULTATION

We visit your property and suggest the optimum solution, considering various parameters such as space, orientation, shadow and of course, your requirements.

Step 2

INSTALLATION

We take care of the complete installation process, using our tried-and-tested systems and the best trained professionals.

Step 3

MAINTENANCE

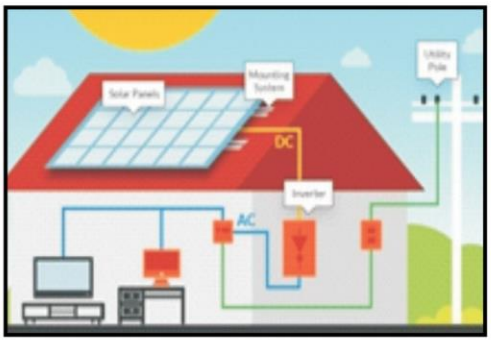
We look after your solar system. We offer Annual Maintenance Contract packages that ensure that your system performs as it was intended to.

Step 4

SECURING ROI

We Ensuring your return on green investment and road map for future earning.

OUR EPC PORTFOLIO



HOME LIGHTING

RESIDENTIAL ROOFTOP

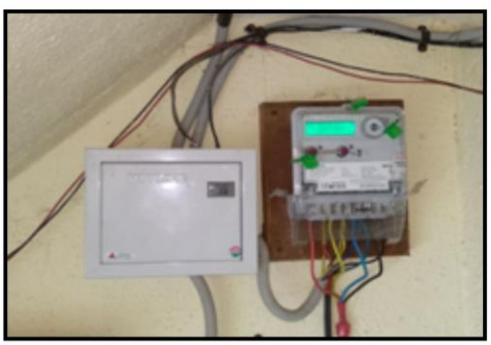
ROOFTOP

SOLAR PUMP

SOLAR POWERED TELECOMTOWER

UTILITY SCALE SOLAR FARMING

OUR INSTALLATION



Nirmitee Solar

SOLAR PV MODULES & EPC

ZERTIFIKAT NR. PVC171131

SEITE 1/2

GENEHMIGUNGSINHABER

NIRMITEE SOLAR PVT. LTD.
GAT NO-194, DATTAWADI, SHELGAON,
CHAKAN SHIKRAPUR ROAD, PUNE-
410501, MAHARASHTRA
INDIA

FERTIGUNGSSTÄTTE

PVC171131

Projekt-Nr.-ID	GENEHMIGTES PRÜFZEICHEN	Prüfberichts-Nr.
SHES1709009467 PV 4334888	SGS TÜV SAAR IEC 61215 IEC 61730 Periodical Inspection PVC171131	SHES160100022001 SHES160100022002 SHES160100022003

Geprüft nach

- IEC 61215:2005 / EN 61215:2005
- IEC 61730-1:2004 modified + IEC 61730-1 AMD 1-2011-11 / EN 61730-1:2007+A1:2012+A2:2013+A11:2014
- IEC 61730-2:2004 modified + IEC 61730-2 AMD 1-2011-11 / EN 61730-2:2007+A1:2012

Zertifiziene(s) Produkt(e)

Crystalline Silicon PV Modules

Modell(e)

Markenzeichen

Nirmitee Solar

Bemerkung(en)

The certificate is for type approval and based on voluntarily product tests. Any changes to the design, materials, components or processing may require repetition of some of the qualification tests in order to retain type approval.

Längste Gültigkeitsdauer

23.06.2021

Zertifizierungsstelle für Produktsicherheit
SGS-TÜV Saar GmbH

SGS-TÜV SAAR GMBH CERTIFICATION BODY

26.10.2017

Markus Spies

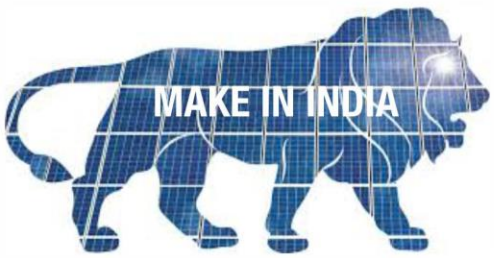
Die PrüF- und Zertifizierordnung ist integraler Bestandteil des Zertifikates
The test mark regulation is an integral part of the certificate.

SGS-TÜV Saar GmbH, Im Stadtwald 14, 66123 Saarbrücken

Website: www.sgs-saar.de

E-mail: de.sgs.saar.qa@sgs.com

Generated through online application of MNRE namely SPIN developed by NIC



Govt. of India MNRE Approved

WARRANTY 25 YEAR

Govt. of India MNRE APPROVED CHANNEL PARTNER

IREDA

WORKS

Nirmitee Solar Pvt. Ltd.
Gat no.194, Dattawadi, Shelgaon,
Chakan shikrapur Rd., Tal. Khed,
Pune - 410501. Maharashtra,India

Cell-9595957777 / 9595057107
Email - technical@nirmiteesolar.com
www.nirmiteesolar.com

OFFICE

Nirmitee Solar Pvt. Ltd.
B03,MB Classic,2nd Floor, Telco Road,
Chinchwad, Pune: 411019.
Maharashtra India

Cell-9595957777 /9595057107
Email - epc@nirmiteesolar.com
www.nirmiteesolar.com