



# WIDEST RANGE

## OF SOLAR PRODUCTS

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## OUR STORY

Luminous Power Technologies, with 38+ years of experience, is a leading and trusted brand known for innovative Power Back-up Solutions like Inverters, Batteries, and Solar Applications.

We are the No.1 player in the Indian inverter and battery market with turnover exceeding INR 5,000 crores.

Our vast presence includes 8 manufacturing units, 28+ sales offices across India, and operations in 41+ countries. Our 6150+ employees serve 1Lakh+ channel partners and 100 million+ delighted customers.



We excel in after-sales service with a PAN India network of 350+ service centers, doorstep service, 24-hour response time, trained professionals, and 24x7 call support.



# LUMINOUS SOLAR

Luminous has been at the fore front in rooftop solar installation in India with more than 65,000 installed sites through an expert base of 450+ System Integrators and in-house project team of 50+ people.

Luminous boasts a wide array of cutting-edge SOLAR SOLUTION products covering Solar Panel, Grid-Tie Inverters, PCUs (Off-grid Inverters) and Solar Batteries, BESS, Charge Controller & BOS.



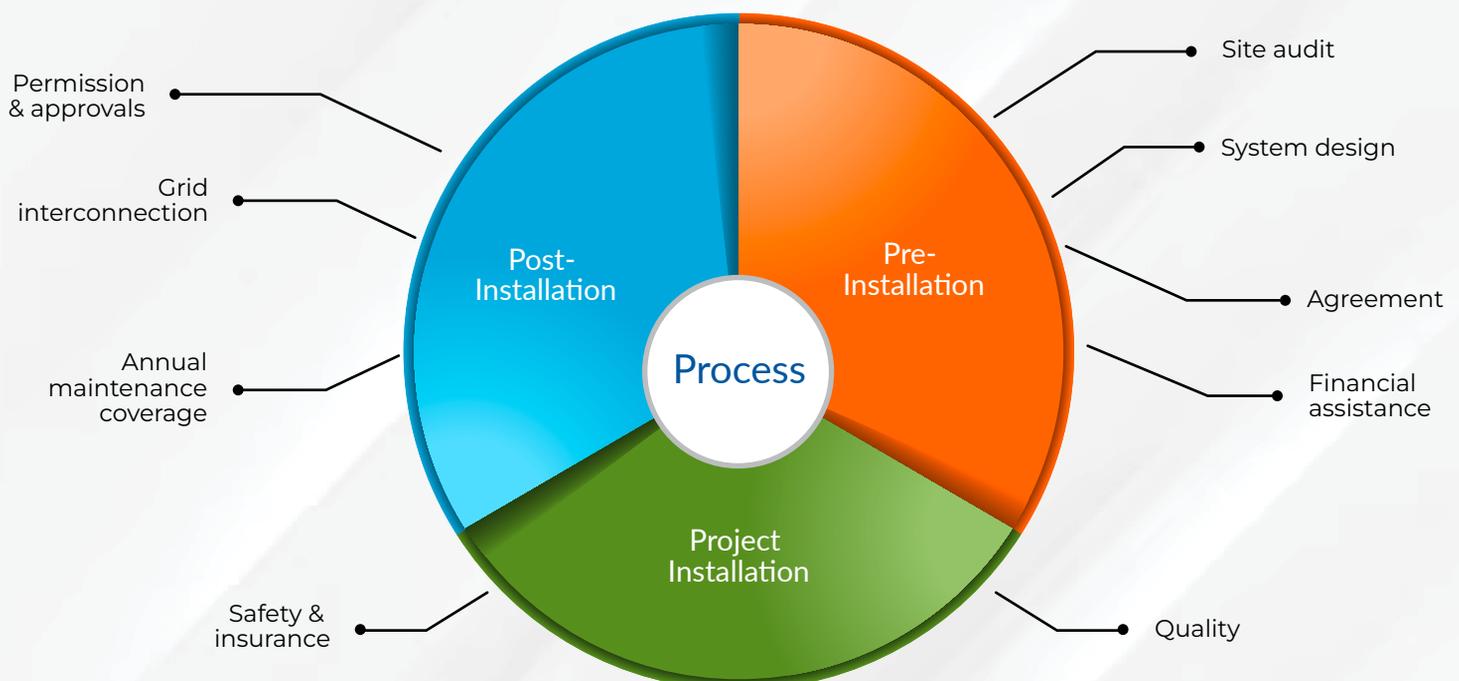
## Your Solar: Made, Installed & Serviced by Luminous

### Making Solar Simple

- Complete Product Range
- Expert Design & Quality Installation
- Flexible Financing for Homes & Businesses
- Nationwide Service with On-Site Support

### Right Design, Designed Right

- Custom Design
- Conformance To BIS & IEC Standards
- Premium Grade Products & Components
- Quality Workmanship



# OUR SOLAR EXPERTISE



## DEDICATED TEAM

- Experts at every step, ensuring excellence throughout.
- Site survey, solution design, project installation, operations and after-sale teams collaborate for top-tier experience.

## COMPLIANCE

- BOS as per Indian Standards, IS :3043.
- Safety from various electrical hazards.



## INSTALLATION

- Installation & commissioning by MNRE empanelled installers
- Best in class material, as per MNRE standards
- Premium quality materials, aligned with MNRE guidelines

## AUDIT

- Multiple quality checks by Luminous experts—before and after installation.
- Products tested, validated & certified as



## SAFETY

- Best in class safety standards to safeguard against occupational hazards
- Lightning arresters to prevent external electrical hazards.
- All equipment complies with IS:3043 norms to prevent electrocution or related

## WHY CHOOSE US

Luminous assures its customers a seamless solar journey by systematically managing each step. From top-of-the-line components to quality workmanship, Luminous is committed to delivering UNMATCHED EXPERIENCE and complete PEACE OF MIND.

**01**

### ONE STOP SOLUTION

The right design, designed right with end-to-end responsibility!

### LIFETIME SUPPORT

From Site Surveys & Project Management to Post Installation requirement, we are always there!

**02**

**03**

### EASY BUYING

Choose from multiple financing options and make your investment process simple and secure!

### BEST QUALITY

Our robust processes and systems ensure that your Solar Rooftop Solution is of top-notch quality!

**04**

# OUR PROJECTS



**2.4 MWp**  
Gwalior, Madhya Pradesh



**1 MWp**  
Kolkata, West Bengal



**1 MWp**  
Hyderabad, Telangana



**800 kWp**  
Sriperumbudur, Tamil Nadu

# OUR PROJECTS



**700 kWp**  
Lucknow, Uttar Pradesh



**680 kWp**  
Daniyawan, Bihar



**600 kWp**  
Ch Sambhaji Nagar, Maharashtra



**500 kWp**  
Bathinda, Punjab

# OUR WIDE PORTFOLIO CATERING TO EVERY CONSUMER NEED



LIGHTS

FANS

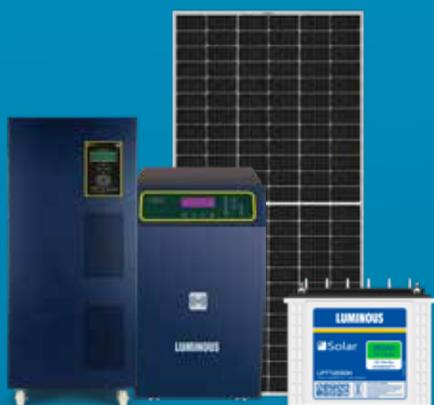
AIR COOLER

FRIDGE

FOR HOME APPLIANCES WITH SHORT DUTY CYCLE



OFF GRID SOLAR SOLUTIONS



HYBRID SOLAR SOLUTIONS



LIGHTS

FANS

AIR CONDITIONER

WATER PUMP



SUBMERSIBLE PUMP

PETROL PUMP

DEEP FREEZER

FOR LIGHTING AND COOLING EQUIPMENTS WITH HEAVY DUTY CYCLE



LIGHTS

FANS

AIR CONDITIONER

WATER PUMP



SUBMERSIBLE PUMP

PETROL PUMP

DEEP FREEZER

MACHINERY

FOR ALL KIND OF LOADS & DUTY CYCLES



ON GRID SOLAR SOLUTIONS

For Homes & Small Shops



**NXG PRO SERIES**  
1KVA/12V & 1KVA/24V

**NXG SERIES**  
500VA to 2000VA



For Large Residences/Farmhouses,  
Offices, Agricultural & Retail Establishments

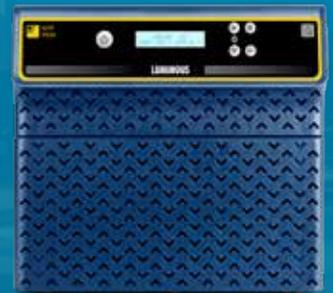


**SOLARVERTER SERIES**  
2KVA/24V - 5KVA/48V

**SOLARVERTER PRO SERIES**  
2KVA/24V - 10.1KVA/120V

**NXP 3500**  
3KVA/24V

**NXP PRO 3500**  
3KVA/24V



NXE 5KVA & NXE PRO 15KVA

For Large Residences/Farmhouses,  
Commercial Establishments & Institutions



**GRID TIE INVERTERS**

2KW TO 350KW  
250 & 350KW (800V) UTILITY GRID GTI

**HYBRID TX SERIES**  
**1 PHASE**  
3KVA, 4KVA & 5KVA

**HYBRID TX SERIES**  
**3 PHASE**  
10.5KVA TO 250KVA



# TOPCON BIFACIAL SOLAR PANELS

## 575W-595W Non-DCR Modules

TOPCON solar cells are the innovative technology of the photovoltaic industry with high efficiency, reduced electron recombination through a tunnel oxide layer, and improved durability with less degradation over time. They often come with bifacial capabilities, capturing sunlight from both sides, and perform well in low-light conditions, making them ideal for utility-scale and rooftop installations.



30 Years  
Performance Warranty



12 Years  
Product Warranty



Enlisted under  
ALMM Order



**Premium Grade A Cells**  
For superior performance and durability.



**Anti-reflection Coating**  
Reduces light reflection to increase efficiency.



**PID Free**  
Prevents potential-induced degradation, ensuring long-term reliability.



**Excellent Power Generation under Low Light**  
Optimizes energy production in various conditions.



**UNSW Specified Cell Qualification**  
Ensures best quality panel offerings

# Bi-facial Transparent Backsheet



Electrical Data (STC )	LUM 24575T144 BI-TS	LUM 24580T144 BI-TS	LUM 24585T144 BI-TS*	LUM 24590T144 BI-TS	LUM 24595TG144 BI-TS
Peak Power Pmax (Wp)	575	580	585	590	595
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88	45.08
Maximum Power Current Imp (A)	13.55	13.62	13.69	13.76	13.2
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86	54.90
Short Circuit Current Isc (A)	14.31	14.37	14.43	14.49	13.79
Module Efficiency (%)	22.26	22.45	22.65	22.84	23.03%

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature: 25 °C, Spectrum AM1.5 (Measurement Uncertainty ± 3%), Isc & Voc ± 5%

NOCT	LUM 24575T144 BI-TS	LUM 24580T144 BI-TS	LUM 24585T144 BI-TS	LUM 24590T144 BI-TS	LUM 24595TG144 BI-TS
Peak Power Pmax (Wp)	431	435	439	443	446
Maximum Power Voltage Vmp (V)	39.44	39.58	39.72	39.85	41.9
Maximum Power Current Imp (A)	10.94	11	11.05	11.11	10.66
Open Circuit Voltage Voc (V)	48.6	48.79	48.98	49.16	52.05
Short Circuit Current Isc (A)	11.55	11.6	11.65	11.7	11.13

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature: 20 °C, Wind Speed 1m/s

BNPI	LUM 24575T144 BI-TS	LUM 24580T144 BI-TS	LUM 24585T144 BI-TS	LUM 24590T144 BI-TS	LUM 24595TG144 BI-TS
Peak Power Pmax (Wp)	637	643	648	654	659
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88	42.88
Maximum Power Current Imp (A)	15.01	15.09	15.17	15.25	14.63
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86	51.86
Short Circuit Current Isc (A)	15.86	15.92	15.99	16.05	15.28

BNPI: 1000W/m<sup>2</sup> + φ.135, BIFACILITY COEFF. (φ) AT BNPI PMAX, ISC IS 80±10% & FOR VOC IS 99±10%, AM 1.5, 25°C

Electrical Characteristics with different rear side power gain (Reference 585 Wp Front)					
Bi-Faciality Gain	10%	15%	20%	25%	
Peak power Pmax (Wp)	643.00	672	702	731	
Maximum Power Voltage Vmp (V)	44.60	44.60	44.60	44.60	
Maximum Power Current Imp (A)	14.42	15.07	15.74	16.39	
Open Circuit Voltage Voc (V)	53.93	53.90	53.95	53.92	
Short Circuit Current Isc (A)	15.11	15.8	16.49	17.18	
Module Efficiency (%)	24.78%	25.94%	27.10%	28.26%	

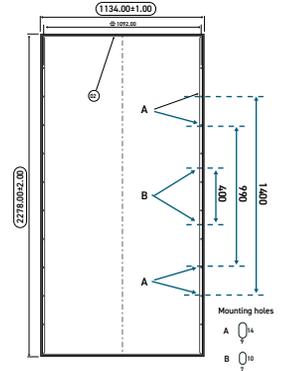
Mechanical Data	LUM 24575T144 BI-TS	LUM 24580T144 BI-TS	LUM 24585T144 BI-TS	LUM 24590T144 BI-TS	LUM 24595TG144 BI-TS
Cell Type	TOPCON (N-Type)				
No. of Cells	72 (144 half-cells) Bifacial solar cells				
Rated Module Voltage (V)	24				
Maximum Series Fuse Rating	25A				
Module Dimensions (mm)	2278x1134x30				
Module Weight (KG)	28.8 Kg				
IP Rating	IP 68 (With Potting)				
Cable	300mm length cables (+ve and -ve Terminal), MC4 Compatible/ MC4 Connectors				
Frame	Silver Anodized aluminium alloy				
Glass	3.2mm thick high transmission low iron tempered glass, AR coated				
Cell Encapsulant	High quality Encapsulant				
Backsheet	Transparent Backsheet				
Maximum surface load capacity	5400 Pa (Snow Load), 2400 Pa (Wind Load)				
Application Class	Class A (Safety Class II)				

Temperature Co-efficients (Tc) and permissible operating conditions	LUM 24575T144 BI-TS	LUM 24580T144 BI-TS	LUM 24585T144 BI-TS	LUM 24590T144 BI-TS	LUM 24595TG144 BI-TS
Operating Temperature	-40°C to +85°C				
Temp coefficient of Open Circuit Voltage	-0.26%/°C				
Temp coefficient of Short Circuit Current	+0.046%/°C				
Temperature coefficient of Power	-0.31%/°C				
NOCT	45°C ± 2°C				

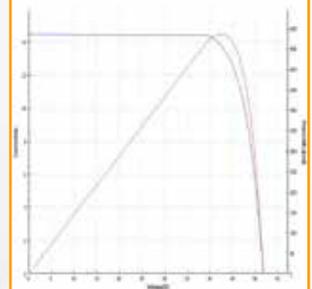
Warranty and Certifications	LUM 24575T144 BI-TS	LUM 24580T144 BI-TS	LUM 24585T144 BI-TS	LUM 24590T144 BI-TS	LUM 24595TG144 BI-TS
Product Warranty	12Years				
Performance Warranty	Linear Performance warranty for 30 Years with 1% for 1st year degradation and 0.45% from year 2 to 30				
Approvals and Certificates*	BIS certified as per IS/IEC standards				

## Solar Module Dimension

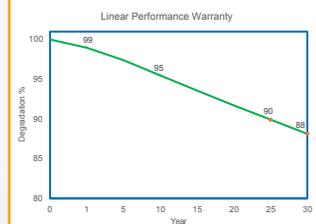
### LUM24585T144 BI-TS



## IV Curve



## Linear Graph



## \* Approvals & Certifications

- IEC 61853-1 | IEC 61853-1
- IEC EC 62759-1 | IEC 61853-2 |
- IEC 61853-2 | IEC 62716 |
- IEC 62759-1 | IEC 61701 |
- IEC TS 62804 -1 | IEC 60068-2-68 |
- IEC 60068-2-68 | IEC TS 62804-1 |
- IEC 61701 | IEC 62716

## Packaging Information

Container	32 Feet
Modules per pallet	36 Nos.
Pallets per container	16 Nos.
Modules per container	576 Nos.

\*5 star BEE rating is only applicable for LUM24585T144 BI-TS

## Bi-facial Glass-to-Glass

Electrical Data (STC )	LUM 24575TG144 BI-GL	LUM 24580TG144 BI-GL	LUM 24585TG144 BI-GL	LUM 24590TG144 BI-GL	LUM 24595TG144 BI-GL
Peak Power Pmax (Wp)	575	580	585	590	595
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88	45.8
Maximum Power Current Imp (A)	13.55	13.62	13.69	13.76	13.2
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86	54.90
Short Circuit Current Isc (A)	14.31	14.37	14.43	14.49	13.79
Module Efficiency (%)	22.26	22.45	22.65	22.84	23.03%

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature: 25 °C, Spectrum AM1.5 (Measurement Uncertainty ± 3%), Isc & Voc ± 5%

NOCT	LUM 24575TG144 BI-GL	LUM 24580TG144 BI-GL	LUM 24585TG144 BI-GL	LUM 24590TG144 BI-GL	LUM 24595TG144 BI-GL
Peak Power Pmax (Wp)	431	435	439	443	446
Maximum Power Voltage Vmp (V)	39.44	39.58	39.72	39.85	41.9
Maximum Power Current Imp (A)	10.94	11	11.05	11.11	10.66
Open Circuit Voltage Voc (V)	48.6	48.79	48.98	49.16	52.05
Short Circuit Current Isc (A)	11.55	11.6	11.65	11.7	11.13

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature: 20 °C, Wind Speed 1m/s

BNPI	LUM 24575TG144 BI-GL	LUM 24580TG144 BI-GL	LUM 24585TG144 BI-GL	LUM 24590TG144 BI-GL	LUM 24595TG144 BI-GL
Peak Power Pmax (Wp)	637	643	648	654	659
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88	42.88
Maximum Power Current Imp (A)	15.01	15.09	15.17	15.25	14.63
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86	51.86
Short Circuit Current Isc (A)	15.86	15.92	15.99	16.05	15.28

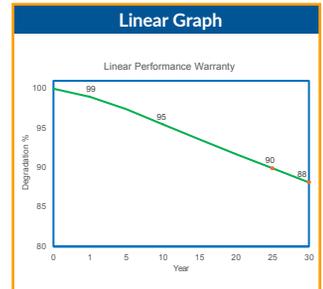
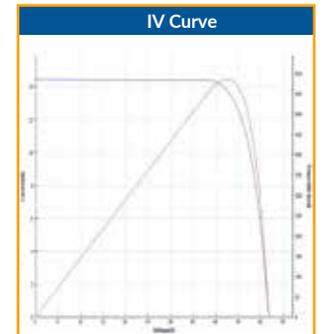
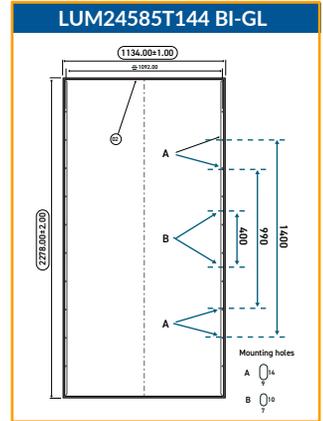
BNPI: 1000W/m<sup>2</sup> + φ.135, BIFACILITY COEFF. (φ) AT BNPI PMAX, ISC IS 80±10% & FOR VOC IS 99±10%, AM 1.5, 25°C

Electrical Characteristics with different rear side power gain (Reference 585 Wp Front)					
Bi-Faciality Gain	10%	15%	20%	25%	
Peak power Pmax (Wp)	644.00	673	702	731	
Maximum Power Voltage Vmp (V)	43.47	43.55	43.68	43.77	
Maximum Power Current Imp (A)	14.81	15.44	16.09	16.73	
Open Circuit Voltage Voc (V)	51.98	52.08	52.19	52.29	
Short Circuit Current Isc (A)	15.86	16.58	17.31	18.03	
Module Efficiency (%)	24.91%	26.04%	27.18%	28.31%	

Mechanical Data	LUM 24575TG144 BI-GL	LUM 24580TG144 BI-GL	LUM 24585TG144 BI-GL	LUM 24590TG144 BI-GL	LUM 24595TG144 BI-GL
Cell Type	TOPCON (N-Type)				
No. of Cells	72 (144 half-cells) Bifacial solar cells				
Rated Module Voltage (V)	24				
Maximum Series Fuse Rating	25A				
Module Dimensions (mm)	2278x1134x30				
Module Weight (KG)	30 Kg				
IP Rating	IP 68 (With Potting)				
Cable	300mm length cables (+ve and -ve Terminal), MC4 Compatible/ MC4 Connectors				
Frame	Silver Anodized aluminium alloy				
Glass	Front 2.0mm ARC; Back 2.0mm Non ARC				
Cell Encapsulant	High quality Encapsulant				
Backsheet	Glass				
Maximum surface load capacity	5400 Pa (Snow Load), 2400 Pa (Wind Load)				
Application Class	Class A (Safety Class II)				

Temperature Co-efficients (Tc) and permissible operating conditions	LUM 24575TG144 BI-GL	LUM 24580TG144 BI-GL	LUM 24585TG144 BI-GL	LUM 24590TG144 BI-GL	LUM 24595TG144 BI-GL
Operating Temperature	-40°C to +85°C				
Temp coefficient of Open Circuit Voltage	-0.26%/°C				
Temp coefficient of Short Circuit Current	+0.046%/°C				
Temperature coefficient of Power	-0.31%/°C				
NOCT	45°C ± 2°C				

Warranty and Certifications	LUM 24575TG144 BI-GL	LUM 24580TG144 BI-GL	LUM 24585TG144 BI-GL	LUM 24590TG144 BI-GL	LUM 24595TG144 BI-GL
Product Warranty	12Years				
Performance Warranty	Linear Performance warranty for 30 Years with 1% for 1st year degradation and 0.45% from year 2 to 30				
Approvals and Certificates*	BIS certified as per IS/IEC standards				



**\*Approvals & Certifications**

- IEC 61853-1 | IEC 61853-2
- IEC EC 62759-1 | IEC 61853-2 | IEC 61853-2 | IEC 62716 | IEC 62759-1 | IEC 61701 | IEC TS 62804-1 | IEC 60068-2-68 | IEC 60068-2-68 | IEC TS 62804-1 | IEC 61701 | IEC 62716

Packaging Information	
Container	32 Feet
Modules per pallet	36 Nos.
Pallets per container	16 Nos.
Modules per container	576 Nos.

# MONO PERC HALF CUT

## DCR Panels - 540W/545W/550W

Mono PERC half-cut solar panels consist of solar cells that are cut in half in order to improve the panel's performance and durability. When the panels are halved, the current also gets halved, which reduces the resistive losses and allows solar cells to produce more power. All this leads to increased efficiency and greater durability.



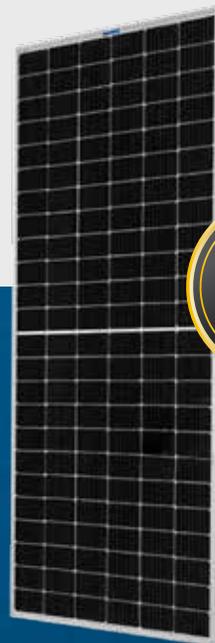
25 Years  
Performance Warranty



12 Years  
Product Warranty



Enlisted under  
ALMM Order



**Premium Grade A Cells**  
For superior performance and durability.



**Anti-reflection Coating**  
Reduces light reflection to increase efficiency.



**PID Free**  
Prevents potential-induced degradation, ensuring long-term reliability.



LOW-LIGHT

**Excellent Power Generation under Low Light**  
Optimizes energy production in various conditions.



**UNSW Specified Cell Qualification**  
Ensures best quality panel offerings

## Bi-facial Transparent Backsheet

Electrical Data   STC*	LUM 24540M (Mono-Facial)	LUM 24540M BI-TS	LUM 24545M BI-TS	LUM 24550M BI-TS
Peak power, Pmax(Wp)	540	540	545	550
Maximum Power Voltage Vmp (V)	41.92	41.92	41.96	42.00
Maximum Power Current Imp (A)	12.89	12.89	12.99	13.1
Open Circuit Voltage Voc (V)	49.40	49.40	49.44	49.48
Short circuit current, Isc (A)	13.72	13.72	13.83	13.95
Module efficiency (%)	20.89	20.89	21.09	21.62
Maximum System Voltage (V)	1500V	1500V	1500V	1500V

\*Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

Electrical Characteristics with different rear side power gain (Reference 545 Wp Front)	LUM 24545M BI-TS				LUM 24550M BI-TS			
	10%	15%	20%	25%	10%	15%	20%	25%
Bi-Faciality Gain	10%	15%	20%	25%	10%	15%	20%	25%
Peak power Pmax (Wp)	599	626	654	681	605	632	660	687
Maximum Power Voltage Vmp (V)	41.96	41.96	41.96	41.96	42	42	42	42
Maximum Power Current Imp (A)	14.28	14.92	15.59	16.23	14.41	15.05	15.71	16.36
Open Circuit Voltage Voc (V)	49.42	49.37	49.44	49.41	49.51	49.49	49.53	49.48
Short Circuit Current Isc (A)	15.21	15.91	16.6	17.29	15.35	16.04	16.74	17.44
Module Efficiency (%)	23.03	24.19	25.16	26.32	23.42	24.39	25.55	26.52

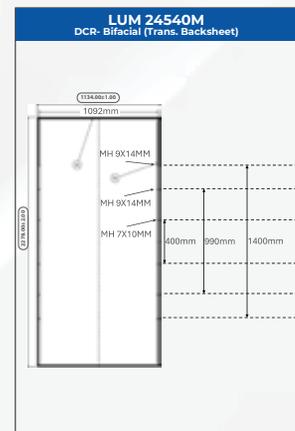
Mechanical Data	LUM 24540M (Mono-Facial)	LUM 24540M BI-TS	LUM 24545M BI-TS	LUM 24550M BI-TS
Cell Type	Mono PERC Half Cut			
No. of Cells	144			
Rated Module Voltage (V)	24			
Maximum Series Fuse Rating	25 A			
Module Dimensions (mm)	2278 x 1134 x 30			
Module Weight (KG)	28.3			
IP Rating	IP 67			
Cable	300 mm length cables			
Frame	Silver anodized aluminium alloy			
Glass	3.2 mm thick high transmission low iron tempered glass, AR coated			
Cell Encapsulant	EVA ( Ethylene Vinyl Acetate )			
Backsheet	White	Transparent		
Maximum surface load capacity	5400 Pa			
Application Class	Class A ( Safety Class II )			

Temperature Co-efficients (Tc) and permissible operating conditions	LUM 24540M (Mono-Facial)	LUM 24540M BI-TS	LUM 24545M BI-TS	LUM 24550M BI-TS
Operating Temperature	-40°C to +85°C			
Temp coefficient of Open Circuit Voltage	-0.3%/°C			
Temp coefficient of Short Circuit Current	+0.06%/°C			
Temperature coefficient of Power	-0.35%/°C			

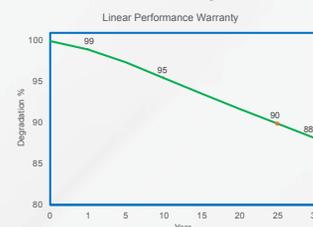
Warranty and Certifications	LUM 24540M (Mono-Facial)	LUM 24540M BI-TS	LUM 24545M BI-TS	LUM 24550M BI-TS
Product Warranty	12 Years			
Performance Warranty	Linear performance warranty for 25 years with 2% for 1st year degradation and 0.55% from year 2 to 25			
Approvals and Certificates**	BIS certified as per IS/IEC standards			

Packaging Information	LUM 24540M (Mono-Facial)	LUM 24540M BI-TS	LUM 24545M BI-TS	LUM 24550M BI-TS
Container	32 Feet			
Modules per pallet	36 Nos.			
Pallets per container	16 Nos.			
Modules per container	576 Nos.			

### Solar Module Dimension



### Linear Graph



### \*\*Certifications

- IEC 61853-1 | IEC 61853-1
- IEC EC 62759-1 | IEC 61853-2 |
- IEC 61853-2 | IEC 62716 |
- IEC 62759-1 | IEC 61701 |
- IEC TS 62804 -1 | IEC 60068-2-68 |
- IEC 60068-2-68 | IEC TS 62804-1 |
- IEC 61701 | IEC 62716

# POLYCRYSTALLINE SOLAR PANEL

## Designed For High Performance

Polycrystalline solar panels consist of multiple photovoltaic cells, and each cell contains silicon crystals. They are a slice cut from a block of silicon, consisting of a number of crystals. These crystals make the panels function like a semiconductor and thus generate electricity. They do not require the placement and shaping of each crystal and therefore produce less waste.



25 Years  
Performance Warranty



5 years  
Product Warranty



Enlisted under  
ALMM Order



**Premium Grade A Cells**  
For superior performance and durability.



**Anti-reflection Coating**  
Reduces light reflection to increase efficiency.



**PID Free**  
Prevents potential-induced degradation, ensuring long-term reliability.



**Excellent Power Generation under Low Light**  
Optimizes energy production in various conditions.



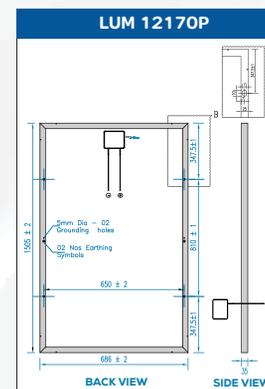
**UNSW Specified Cell Qualification**  
Ensures best quality panel offerings

## Electrical Parameters @ STC\*

Model ALMM Reference Model	LUM 12170P
Cell Type	Poly
No. of Cells	36
Peak Power P <sub>Max</sub> (Wp)	170Wp
Rated Module Voltage (V)	12V
Maximum Power Voltage V <sub>mp</sub> (V)	18.86V
Maximum Power Current I <sub>mp</sub> (A)	9.02A
Open Circuit Voltage V <sub>oc</sub> (V)	23.01V
Short Circuit Current I <sub>sc</sub> (A)	9.61A
Module Efficiency (%)	16.47
Maximum System Voltage (V)	600V
Maximum Series Fuse Rating	10A

\*STC (1000W/m<sup>2</sup>), AM1.5, cell temperature 25°C. Power Tolerance : 0/+5%. Power measurement accuracy:±3%

## Solar Module Dimension



## Mechanical Data

Module Dimensions (mm) LxWxT	1505X686X35
Module Weight (kgs)	11
IP Rating	IP 65
Cable	1000mm
Frame	Silver Anodized Aluminium
Glass	3.2mm ARC
Cell Encapsulant	EVA
Back Sheet	White Backsheet
Maximum Surface Load Capacity	5400 Pa (Pascals)
Application Class	Class A (Safety Class II)

## Permissible Operating Conditions

Operating Temperature	- 40°C to + 85°C
Temp coefficient of Open Circuit Voltage	-0.23 %/°C
Temp coefficient of Short Circuit Current	0.07 %/°C
Temp coefficient of Power	-0.29 %/°C

## Warranty and Certifications

Product Warranty**	5 Years
Performance Warranty**	Linear Performance Warranty for 25 Years with 3% for 1st year degradation and 0.70% from year 2 to 25
Approvals and Certificates	BIS certified as per IS/IEC standards

\*\* Refer to Luminous Warranty document for Terms and conditions.  
Technical specifications are subject to change without prior notice.

# GRID TIE INVERTERS

## Perfect Blend of Safety and Efficiency

The NXi range from Luminous is available in single and three phase configurations. With best-in-class reliability and compliance to safety standards, the inverters are available in capacities from 2kW-100 kW.



>99%  
Efficiency



10\* Years  
Warranty



Remote  
Monitoring



**MPPT** **Maximum Power Point Tracking**  
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



**Anti-Islanding Protection**  
Disconnects the inverter from grid during power failure preventing any electrical shock to the linemen at work.



**IV Curve Scanning**  
Allows IV curve scanning for each panel string & identify fault or abnormality (25kW & above models)



**String Level Monitoring**  
Allows monitoring at each individual string level to ensure consistent output of system (25kW & above models)



**Night SVG Function**  
Helps in providing sufficient reactive power required by grid & produces 60% of reactive power of its rated max output (50kW & above models)

Solar Estimation Chart

Solution		Panel Connection Combination per MPPT (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
GTI	PV Panel Watt		
NXI 2kW	590Wp*4 Nos.	4 (S)	160
NXI 3kW	590Wp*6 Nos.	6 (S)	240
NXI 4kW	590Wp*7 Nos.	7 (S)	320
NXI 5kW	590Wp*9 Nos.	9 (S)	400
NXI 6kW	590Wp*11 Nos.	11 (S)	480
NXI 8kW	590Wp*14 Nos.	14 (S)	640
NXI 10kW	590Wp*18 Nos.	18 (S)	800

Grid Tie System



## Single Phase

Model Name	Nxi 120	Nxi 130	Nxi 140	Nxi 150
Rated output power (kW)	2	3	4	5
<b>Input DC</b>				
Max. DC Input Power (kW)	3	4.5	6.0	7.5
Max. DC Input Voltage (V)	550		550	
Start-up Voltage [V]	80		100	
MPPT Voltage range (V)	70 - 500		90 - 550	
Max input current per MPPT (A)	16A		16A/16A	
Number of MPPT	1		2	
Max Input Strings Number	1		2	
<b>Output (AC)</b>				
Rated output power (kW)	2	3	4	5
Max. output power [kW]	2.2	3.3	4.4	5
Max. output Current [A]	10.5	15.7	21	25
Grid Frequency range (Hz)	50/60Hz			
Power Factor (at rated output power)	0.8 ...1... 0.8			
Total harmonic distortion [THDi]	< 1.5%			
Feed-in phase/connection phase	Single Phase			
<b>Efficiency</b>				
Max. Efficiency	>97.2		>97.6	
MPPT Efficiency	>99.5			
<b>Protection</b>				
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection, Anti-Islanding Protection, Temperature Protection			
<b>Interface</b>				
DC Connection	MC4 Connectors			
Display	LCD 2X 20 Z		LED + Bluetooth App	
Datalogger & Communication	RS485/GSM/Wi-Fi* (Optional)			
<b>General Data</b>				
Topology	Transformerless			
Consumption @ night	< 1 W			
Operating Temperature Range	-25°C to 60°C			
Cooling Method	Natural Convection			
Relative Humidity	0 - 100 %			
Max. Operational Altitude	4000m			
Noise [dBA]	<30dBA			
Designed Lifetime	> 20 years			
Ingress Protection	IP66			
Dimensions (W*H*D) (mm)	310W*373H*160D		310W *543H *160D	
Net weight (Kg)	7.4	7.7	8.9	
<b>Standards</b>				
Safety/EMC	BIS Certified as per IS/IEC standards			

\* Check availability of GSM or Wi-Fi dongle before ordering.  
 Technical specifications are subject to change without prior notice.

### Three Phase

MODEL	Nxi 305	Nxi 306	Nxi 308	Nxi 310	Nxi 312	Nxi 315	Nxi 320
Rated output power (kW)	5	6	8	10	12	15	20
Input DC							
Max. DC Input Power (kW)	7.5	9.0	12	15	18	22.5	30
Max. DC Input Voltage (V)	1100						
Start-up Voltage [V]	180						
MPPT Voltage range (V)	160 - 1000						
Max input current per MPPT (A)	16A/16A				32A/32A		
Number of MPPT	2						
Max Input Strings Number	2				4		
Output (AC)							
Rated output power (kW)	5	6	8	10	12	15	20
Max. output power [kW]	5.5	6.6	8.8	11	13.2	16.5	22
Max. output Current [A]	8.4	10	13.4	16.7	20.1	25.1	33.3
Grid Frequency range (Hz)	50/60 Hz						
Power Factor (at rated output power)	0.8 ...1... 0.8						
Total harmonic distortion [THDi]	<2%						
Feed-in phase/connection phase	Three Phase						
Efficiency							
Max. Efficiency	98.30%				98.60%		
MPPT Efficiency	99.5%						
Protection							
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection, Anti-Islanding Protection, Temperature Protection, Integrated DC Switch (optional)						
Interface							
DC Connection	MC4 Connectors						
Display	LCD 2X 20Z						
Datalogger & Communication	RS485/GSM/Wi-Fi* (Optional)						
General Data							
Topology	Transformerless						
Consumption @ night	< 1 W						
Operating Temperature Range	-25°C to 60°C						
Cooling Method	Natural Convection				Intelligent Redundant Fan Colling		
Relative Humidity	0 to 100%						
Max. Operational Altitude	4000m						
Noise [dBA]	<30 dBA						
Designed Lifetime	> 20 years						
Ingress Protection	IP66						
Dimensions (W*H*D) (mm)	310W*563H*129D				310W*608H*219D		
Net weight (Kg)	17.8				18.8		20
Standards							
Safety/EMC	BIS Certified as per IS/IEC standards						

\* Check availability of GSM or Wi-Fi dongle before ordering.  
 Technical specifications are subject to change without prior notice.

### Three Phase

MODEL	Nxi 325	Nxi 330	Nxi 350	Nxi 360	Nxi 380	Nxi 3100
Rated output power (kW)	25	30	50	60	80	100
<b>Input DC</b>						
Max. DC Input Power (kW)	37.5	45	75	90	120	150
Max. DC Input Voltage (V)	1100					
Start-up Voltage [V]	180		200		180	
MPPT Voltage range (V)	200-1000				160 - 1000	
Max input current per MPPT (A)	32A/32A/32A		4*28.5A		3*40A+3*32A	4*40A+4*32A
Number of MPPT	3		4		6	8
Max Input Strings Number	6		12		12	16
<b>Output (AC)</b>						
Rated output power (kW)	25	30	50	60	80	100
Max. output power [kW]	27.5	33	55	66	88	110
Max. output Current [A]	27.5	33	72.2	86.6	133.7	167.1
Grid Frequency range (Hz)	50/60 Hz		47-52 or 57-62			50/60 Hz
Power Factor (at rated output power)	0.8...1... 0.8					
Total harmonic distortion [THDi]	<3%		<2%		<3%	
Feed-in phase/connection phase	Three Phase					
<b>Efficiency</b>						
Max. Efficiency	98.5%		98.7%		98.5%	
MPPT Efficiency	>99.5%				99.5%	
<b>Protection</b>						
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection, Anti-Islanding Protection, Temperature Protection, Integrated DC Switch (optional)					
<b>Interface</b>						
DC Connection	MC4 Connectors					
Display	LCD, 2x20 Z					
Datalogger & Communication	RS485/GSM/Wi-Fi (Optional)					
<b>General Data</b>						
Topology	Transformerless					
Consumption @ night	< 1 W			< 2 W		
Operating Temperature Range	-25°C to 60°C					
Cooling Method	Intelligent redundant fan cooling					
Relative Humidity	0 to 100%					
Max. Operational Altitude	4000m					
Noise [dBA]	<30 dBA		<60 dBA		<65 dBA	
Designed Lifetime	> 20 years					
Ingress Protection	IP66					
Dimensions (W*H*D) (mm)	647W*629H*252D		630W*700H*357D		1065W*587H*363D	1183W*585H*363D
Net weight (Kg)	37		63		79.5	93
<b>Standards</b>						
Safety/EMC	BIS Certified as per IS/IEC standards					

# GRID TIE INVERTERS - NXI W

## Perfect for Commercial & Industrial Use

The NXIW series from is available in Three phase configuration. With best-in-class reliability and compliance to safety standards, the inverters are available in capacities 125kw & 150kW.



>99%  
Efficiency



10 Years  
Warranty



Free Dongle  
Inside Box



**MPPT** **Maximum Power Point Tracking**  
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



**Anti-Islanding Protection**  
Disconnects the inverter from grid during power failure preventing any electrical shock to the linemen at work.



**Inbox Wi-Fi Dongle**  
Easy plug-and-play connectivity for GTI, enabling real-time monitoring, remote access, and smart data logging.



**Up to 150% DC overloading**  
higher power generation during low-light and peak demand hours, ensuring better utilization of your inverter

### Three Phase

Datasheet		NXI W3125	NXI W3150
Input (DC)	Max.DC power	187.5KW (Upto 150% DC Overloading)	225KW (Upto 150% DC Overloading)
	Max. DC voltage		1100V
	Start voltage		195V
	Nominal voltage		600V
	MPP voltage range		180V-1000V
	No. of independent MPPT inputs / strings per MPPT input	10 / 2	10/6*2+4*3
	Max. input current per MPP tracker	32A	45A
	Max. short-circuit current per MPP tracker	40A	56.5A
Output (AC)	AC nominal power	125kW@30°C 125kW@40°C 125kW@50°C	150kW@30°C 150kW@40°C 150kW@50°C
	Max. AC apparent power	137.5kW	165kW
	Nominal AC voltage		380VAC/400VAC
	AC voltage(range*)		340VAC-440VAC
	AC grid frequency range*		50/60 Hz(45-55Hz/55-65 Hz)
	Max. output current	198.5A@400V 208.9A@380V	250.7A@380V 238.2A@400V
	Adjustable power factor		0.8leading ...0.8lagging
	THDi		<3%
	AC grid connection type		3W/N/PE
	Efficiency	Max. efficiency	
MPPT efficiency			99.9%
Protection devices		DC reverse polarity protection	
	DC switch		✓
	AC/DC surge protection		Type II / Type II
	Insulation resistance monitoring		✓
	AC short-circuit protection		✓
	Ground fault monitoring		✓
	String detection		✓
	PID recovery function		✓
General data	Dimensions (W / H / D)	970/640/345mm	1075/640/367mm
	Weight	84kg	93kg
	Operating temperature range		-30°C ... +60°C
	Night time power consumption		< 1W
	Topology		Transformerless
	Cooling		Smart Cooling
	Protection degree		IP66
	Relative humidity		0- 100%
	Altitude		4000m
	DC connection		H4/MC4 (Max.6mm <sup>2</sup> )
	AC connection		OT Terminal (Max. 240mm <sup>2</sup> )
	Display		LED/WIFI+APP
	WiFi Dongle		Inbox
	Cetifications	CE,IEC62116, IEC61727, CQC, VDE0126, VFR2019, EN50549-1/2, C10/C11, UNE206007, G99, CEI 0-21/0-16, N4105&N4110, UNE206006,MEA, PEA, KSC8565	

\* The AC voltage range and frequency range may vary depending on specific country grid standard.  
All specification are subject to change without notice

# GRID TIE INVERTERS - NXI A

## Ideal for Utility Scale & KUSUM Scheme

The NXIA series from is available in Three phase configuration. With best-in-class reliability and compliance to safety standards, the inverters are available in capacities 250kw & 350kw.



>99%  
Efficiency



10 Years  
Warranty



Remote  
Monitoring



**MPPT** **Maximum Power Point Tracking**  
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



**Anti-Islanding Protection**  
Disconnects the inverter from grid during power failure preventing any electrical shock to the linemen at work.



**Inbox Wi-Fi Dongle**  
Easy plug-and-play connectivity for GTI, enabling real-time monitoring, remote access, and smart data logging.



**Up to 150% DC overloading**  
higher power generation during low-light and peak demand hours, ensuring better utilization of your inverter

**Input (DC)**

Max. input voltage	1500V	
MPP voltage range / rated input voltage	500V - 1500 V / 1080 V	
Min. input voltage	500 V	
Initial. feed-in voltage	550 V	
Max. operating input current	75A	
Max. short circuit current	113A	
No. of independent MPPT inputs / strings per MPPT input	5/5	6/5

**Output (AC)**

AC output power	250000 VA@30°C 250000 VA@40°C 250000 VA@50°C	352000 VA@30°C 340000 VA@40°C 300000 VA@50°C
AC nominal voltage	800V	
AC voltage range	640 V - 920 V	
AC grid frequency / range	50 Hz / 45 Hz - 55 Hz 60 Hz / 55 Hz - 65 Hz	
Max. output current	198.5 A	254 A
Adjustable power factor range	0.8 leading to 0.8 lagging	
Feed-in phases	3 / 3-PE	
Harmonic distortion (THD) at rated output	< 3%	

**Efficiency & Protection**

Max. efficiency	99.01%
DC switch	✓
Anti-islanding Protection	✓
AC Overcurrent Protection	✓
DC reverse connection protection	✓
AC short circuit protection	✓
PV string monitoring	✓
DC Surge Protection	Type II
AC Surge Protection	Type II
Residual Current Monitoring Unit	✓
Ground fault monitoring	✓
Grid monitoring	✓

**General data**

Dimensions (W / H / D)	1158 x 760 x 382 mm	
Weight	≤ 116 kg	≤ 117 kg
Operating temperature range	-30°C...+60°C	
Self-consumption (at night)	< 5 W	
Topology	Non-isolated	
Cooling concept	Smart active cooling	
Degree of protection	IP66	
Max. permissible value for relative humidity	0~100% (Non-Condensing)	
Max. operating altitude	5000m (4000m derating)	

**Features**

DC Connector	DC Plug-in connector
AC Connector	OT/DT Terminal (Max.500mm2)
Display	LED+Bluetooth APP
USB	✓
Communication	RS485/ PLC
Certificates and approvals (more available on request)	IEC 62109-1/2, IEC 61727, IEC 62116, IEC 61683, IEC 60086, EN 50549-1/2

# GRID TIE INVERTERS - NXI T

## Perfect Blend of Safety and Efficiency

The NXI T series from is available in single and Three phase configuration. With best-in-class reliability and compliance to safety standards, the inverters are available in capacities 3kw, 5Kw and 10kW.



>99%  
Efficiency



10 Years  
Warranty



Remote  
Monitoring



**MPPT** **Maximum Power Point Tracking**  
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



**Anti-Islanding Protection**  
Disconnects the inverter from grid during power failure preventing any electrical shock to the linemen at work.



**Inbox Wi-Fi Dongle**  
Easy plug-and-play connectivity for GTI, enabling real-time monitoring, remote access, and smart data logging.



**Up to 150% DC overloading**  
higher power generation during low-light and peak demand hours, ensuring better utilization of your inverter

Solar Estimation Chart

Solution	PV Panel Watt	Panel Connection Combination per MPPT (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
GTI			
NXI T130	590Wp*6 Nos.	6 (S)	240
NXI T150	590Wp*9 Nos.	9 (S)	400
NXI T310	590Wp*18 Nos.	18 (S)	800

Grid Tie System



Inbox Wi-Fi Dongle



## Single Phase & Three Phase

Model Name	NXI T130	NXI T150	NXI T310
Rated output power (kW)	3	5	10
<b>INPUT DC</b>			
Max. DC Input Power (kW)	4.5	7.5	15.0
Max. DC Input Voltage (V)	550	550	1000
Start-up Voltage [V]	75	75	125
MPPT Voltage range (V)	100 - 500	100 - 500	160-850
Max input current per MPPT (A)	18A	22A	18A
Number of MPPT	1	1	2
Max Input Strings Number	1	1	1
<b>OUTPUT (AC)</b>			
Rated output power (kW)	3	5	10
Max. output power [kW]	3.3	5.5	15.0
Max. output Current [A]	16	23.0	17.0
Grid Frequency range (Hz)	50/60Hz		
Power Factor (at rated output power)	0.8 ... 1... 0.8		
Total harmonic distortion [THDi]	< 1.5%	< 2.5%	< 5%
Feed-in phase/connection phase	Single Phase		Three Phase
<b>EFFICIENCY</b>			
Max. Efficiency	97.5%	97.5%	98.4%
MPPT Efficiency	>99.9		
<b>PROTECTION</b>			
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection, Anti-Islanding Protection, Temperature Protection		
<b>INTERFACE</b>			
DC Connection	MC4 Connectors		
Display	LCD	LCD	LCD
Datalogger & Communication	Standard Wi-Fi / RS485 (optional)		Wi-Fi / RS485/ GPRS
<b>GENERAL DATA</b>			
Topology	Transformerless		
Consumption @ night	< 0.2 W		
Operating Temperature Range	-25°C to 60°C		
Cooling Method	Smart Cooling		
Relative Humidity	0 - 95 % (No Condensation)		
Max. Operational Altitude	2000m		
Noise [dBA]	<25dBA		
Designed Lifetime	> 20 years		
Ingress Protection	IP65		
Dimensions (W*H*D) (mm)	300W*294H*104D	370W *318.5H *105.5D	480W *476H *157D
Net weight (Kg)	5.0	7.0	16.0
<b>STANDARDS</b>			
Safety/EMC	BIS Certified as per IS/IEC standards		

Technical specifications are subject to change without prior notice.

For more information



**THE GRID TIE INVERTER**

Solar Grid Tie Inverter - On Grid Solar Solution for maximizing savings !  
9,850 views    48 likes    1 dislike    SHARE

**LUMINOUS** Luminous India  
Published on Apr 8, 2018

Tired of paying high electricity bills every month? Switch to Luminous Grid-Tie Inverter NOW!  
Produce your own electricity using solar, consume it, feed the surplus generated back to the grid and get paid for it!

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Videos & more product information.

# HYBRID INVERTER

## Savings & Backup All Together

Hybrid Inverter range from Luminous is a combination of an on-grid inverter and off-grid inverter making it more versatile than other solar inverters helping in lowering your electricity bills and protecting from power outages. It can supply solar power to run your electrical appliances, store electricity in batteries required during power outages as well as export excess power generated to grid. Available in 3KVA, 4KVA & 5KVA.



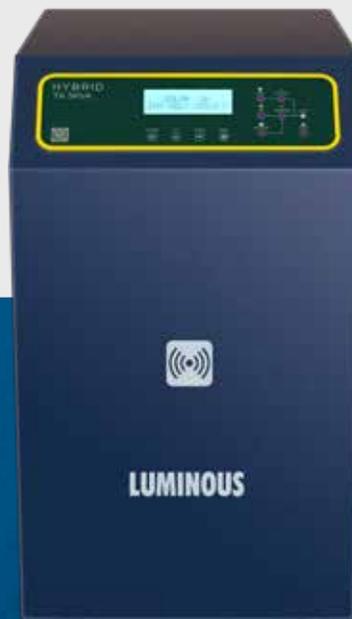
Advanced  
DSP Control



Inbox Wi-Fi  
dongle



3 Years  
Warranty



**Export Excess Power  
Generated & Also Get Backup**  
Store electricity in battery for backup as  
well as export excess electricity to grid



**Max PV Capacity Utilization**  
Ensures that the connected solar  
panels are used to their fullest potential,  
even under varying load conditions



**Anti-Islanding protection**  
Disconnects the inverter from  
grid during power failure  
preventing any electrical shock to  
the linemen at work



**Energy Independence**  
In case of grid unavailability,  
automatically switches over to  
battery supply, continuing  
to operate independently from grid



**Remote Monitoring**  
Multiple modes of connectivi-  
ty for remote monitoring  
enables keeping track of  
solar generation and proac-  
tive maintenance

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Hybrid Inverter	Solar Battery	PV Panel Watt		
Hybrid Tx 3KVA	150Ah x 4	590Wp*6 Nos.	3 (S) 2 (P)	240
Hybrid Tx 4KVA	150Ah x 4	590Wp*8 Nos.	2 (S) 4 (P)	320
Hybrid Tx 5KVA	150Ah x 4	590Wp*9 Nos.	3 (S) 3 (P)	400

## Hybrid Inverter



## Technical Specifications

Model	HYBRID TX 3kVA	HYBRID TX 4kVA	HYBRID TX 5kVA
Nominal Battery Voltage (Vdc)	48V		
Output Waveform	Pure Sine Wave		
<b>SOLAR PHOTOVOLTAIC INPUT</b>			
Type of Charger	MPPT		
Maximum PV Power (kW)	3KW	4KW	5KW
Input Voltage Range (Voc)	70V - 170 V		
Input Voltage Range (Vmp)	58V - 132 V		
Maximum I/P Current (Array)	45A	60A	60A
Maximum MPPT Output current (A)	65A	80A	100A
Maximum Conversion Efficiency (%)	>93%		
<b>GRID INPUT</b>			
Input Supply Phase	Single Phase		
Grid Voltage Range	175V - 280V		
Nominal Grid Current (import)	20A	23A	29A
<b>GRID OUTPUT</b>			
Grid Current (export)	10.5 ± 2A	14A ± 2A	17A ± 2A
<b>BATTERY</b>			
Nominal Battery Voltage	48VDC		
Charging Stages	Boost, Float, Absorption		
<b>INVERTER</b>			
Switching Element	MOSFET		
Control	32 Bit DSP controlled		
Nominal Output Voltage (V) & Voltage range	230 V ± 2%		
Output Supply Phase	1 Phase 2 Wire		
Output waveform	Pure Sine Wave		
Nominal Frequency (Hz)	50 Hz		
Nominal Output Current (A)	10.5A	14A	17A
Output Voltage Distortion (THD)	<5%		
Overload at nominal output voltage	110% for 10 minutes, 125% for 1minute, 200% for 5 seconds		

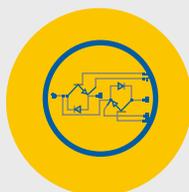
# 3 PHASE SOLAR HYBRID TX SERIES

## Savings & Backup All Together

3 Phase Solar Hybrid TX is designed with advanced technology. It adopts double transform high frequency and high-performance digital control technique (DSP), with perfect protection, super network management function, reasonable man-machine interface, and a series of precision designs to meet high-reliability requirements. Experience a power that integrates reliability, safety, and maintainability characteristics.



Advanced DSP Control



IGBT Based Rectifier



3 Years Warranty



**Export Excess Power Generated & Also Get Backup**  
Store electricity in battery for backup as well as export excess electricity to grid



**User Selectable Priority Settings**  
Allows users to choose among reduced grid dependency & energy savings, enhanced backup and autonomy from grid and export access power when required



**Anti-Islanding protection**  
Disconnects the inverter from grid during power failure preventing any electrical shock to the linemen at work



**Energy Independence**  
In case of grid unavailability, automatically switches over to battery supply, continuing to operate independently from grid



**Remote Monitoring**  
Multiple modes of connectivity for remote monitoring enables keeping track of solar generation and proactive maintenance

## Applications



Petrol Pump



AC Unit



Cold Storage



Microgrid



Factory & Dairy  
Equipment



Water Pump



ATM



Farmhouse



Primary Health  
Care Center



Rural Bank



Government  
Offices



Institutions

## Hybrid Inverter



<b>System Rating (kVA/kW)</b>		<b>10.5KVA/8.4kW</b>
Open circuit voltage	400V	
Maximum PV Power	10.5kW	
Charge Controller	MPPT Charge Controller	
MPPT Voltage Range	200 - 380	
Switching Element	IGBT	
Type of Charger	MPPT	
Charger Efficiency	>95%	
<b>GRID</b>		
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)	
Input Frequency	50Hz ± 6%	
<b>BATTERY</b>		
Battery Voltage	120VDC	
Grid charger type	Bi-Directional	
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (upto inverter kVA Capacity)	
Battery Type	Lead Acid/SMF	
<b>INVERTER</b>		
Switching Element	IGBT	
Output wave form	Pure Sine Wave	
Output Nominal Voltage	415VAC ±2%, 3Ph	
Output Fequency	50Hz ±1%	
Load Power Factor	0.6 lag to 1 (within VA and kW rating)	
Inverter Peak Efficiency	90%	
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%	
Galvanic isolation	Inbuilt isolation transformation inverter output	
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec	
<b>PROTECTION</b>		
Protection	Input Under and Over voltage, Input Under and Over Fequency, Output Overload, Output short circuit, Output over and Under Voltage	
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage	
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>		
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)	
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging	
Alarm	Audible alarm for fault conditions and warnings	
<b>CONFIGURATION</b>		
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)	
Parameter Setting	All main Parameters can be set through LCD Display	
Bypass	Manual bypass switch available for maintenance and service	
<b>ENCLOSURE</b>		
Degree of protection	IP 20	
Cooling	Forced Air Cooling	
Color	RAL 5013 Cobalt Blue	
Dimensions (L*W*H)mm	710 x 300 x 790	
Netweight (Approx in Kg's)	130	
<b>ENVIRONMENT</b>		
Temperature Operating	0-40° C	
Max. Relative humidity@25° (non condensing)	Upto 95%	
Max. Altitude above sea level without de-rating	upto 1000 mtr	

Stock Availability: 8 to 10 weeks from date of Purchase Order  
 Technical specifications are subject to change without prior notice

System Rating (kVA/kW)	15kVA/12kW	20kVA/16kW
Open circuit voltage	400V	500V
Maximum PV Power	15kW	20kW
Charge Controller	MPPT Charge Controller	
MPPT Voltage Range	200 - 380	300 - 480
Switching Element	IGBT	
Type of Charger	MPPT	
Charger Efficiency	>95%	
<b>GRID</b>		
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)	
Input Frequency	50Hz ± 6%	
<b>BATTERY</b>		
Battery Voltage	180VDC	240VDC
Grid charger type	Bi-Directional	
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (upto inverter kVA Capacity)	
Battery Type	Lead Acid/SMF	
<b>INVERTER</b>		
Switching Element	IGBT	
Output wave form	Pure Sine Wave	
Output Nominal Voltage	415VAC ±2%, 3Ph	
Output Frequency	50Hz ±1%	
Load Power Factor	0.6 lag to 1 (within VA and kW rating)	
Inverter Peak Efficiency	90%	
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%	
Galvanic isolation	Inbuilt isolation transformation inverter output	
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec	
<b>PROTECTION</b>		
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage	
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage	
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>		
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)	
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging	
Alarm	Audible alarm for fault conditions and warnings	
<b>CONFIGURATION</b>		
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)	
Parameter Setting	All main Parameters can be set through LCD Display	
Bypass	Manual bypass switch available for maintenance and service	
<b>ENCLOSURE</b>		
Degree of protection	IP 20	
Cooling	Forced Air Cooling	
Color	RAL 5013 Cobalt Blue	
Dimensions (L*W*H)mm	770 x 400 x 880	
Netweight (Approx in Kg's)	154	
<b>ENVIRONMENT</b>		
Temperature Operating	0-40° C	
Max. Relative humidity@25° (non condensing)	Upto 95%	
Max. Altitude above sea level without de-rating	upto 1000 mtr	

Stock Availability: 8 to 10 weeks from date of Purchase Order  
Technical specifications are subject to change without prior notice

System Rating (kVA/kW)	25kVA/20kW
Open circuit voltage	500V
Maximum PV Power	25kW
Charge Controller	MPPT Charge Controller
MPPT Voltage Range	300 - 480
Switching Element	IGBT
Type of Charger	MPPT
Charger Efficiency	>95%
<b>GRID</b>	
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)
Input Frequency	50Hz ± 6%
<b>BATTERY</b>	
Battery Voltage	240VDC
Grid charger type	Bi-Directional
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (upto inverter kVA Capacity)
Battery Type	Lead Acid/SMF
<b>INVERTER</b>	
Switching Element	IGBT
Output wave form	Pure Sine Wave
Output Nominal Voltage	415VAC ±2%, 3Ph
Output Fequency	50Hz ±1%
Load Power Factor	0.6 lag to 1 (within VA and kW rating)
Inverter Peak Efficiency	90%
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%
Galvanic isolation	Inbuilt isolation transformation inverter output
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec
<b>PROTECTION</b>	
Protection	Input Under and Over voltage, Input Under and Over Fequency, Output Overload, Output short circuit, Output over and Under Voltage
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>	
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging
Alarm	Audible alarm for fault conditions and warnings
<b>CONFIGURATION</b>	
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)
Parameter Setting	All main Parameters can be set through LCD Display
Bypass	Manual bypass switch available for maintenance and service
<b>ENCLOSURE</b>	
Degree of protection	IP 20
Cooling	Forced Air Cooling
Color	RAL 5013 Cobalt Blue
Dimensions (L*W*H)mm	900 x 400 x 880
Netweight (Approx in Kg's)	180
<b>ENVIRONMENT</b>	
Temperature Operating	0-40° C
Max. Relative humidity@25° (non condensing)	Upto 95%
Max. Altitude above sea level without de-rating	upto 1000 mtr

Stock Availability: 8 to 10 weeks from date of Purchase Order  
Technical specifications are subject to change without prior notice

System Rating (kVA/kW)	30kVA/24kW	40kVA/32kW	50kVA/40kW
Open circuit voltage	750V		
Maximum PV Power	30kW	40kW	50kW
Charge Controller	MPPT Charge Controller		
MPPT Voltage Range	540 - 730	540 - 730	540 - 730
Switching Element	IGBT		
Type of Charger	MPPT		
Charger Efficiency	>95%		
<b>GRID</b>			
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)		
Input Frequency	50Hz ± 6%		
<b>BATTERY</b>			
Battery Voltage	360VDC		
Grid charger type	Bi-Directional		
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (upto inverter kVA Capacity)		
Battery Type	Lead Acid/SMF		
<b>INVERTER</b>			
Switching Element	IGBT		
Output wave form	Pure Sine Wave		
Output Nominal Voltage	415VAC ±2%, 3Ph		
Output Fequency	50Hz ±1%		
Load Power Factor	0.6 lag to 1 (within VA and kW rating)		
Inverter Peak Efficiency	90%		
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%		
Galvanic isolation	Inbuilt isolation transformation inverter output		
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec		
<b>PROTECTION</b>			
Protection	Input Under and Over voltage, Input Under and Over Fequency, Output Overload, Output short circuit, Output over and Under Voltage		
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage		
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>			
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)		
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging		
Alarm	Audible alarm for fault conditions and warnings		
<b>CONFIGURATION</b>			
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)		
Parameter Setting	All main Parameters can be set through LCD Display		
Bypass	Manual bypass switch available for maintenance and service		
<b>ENCLOSURE</b>			
Degree of protection	IP 20		
Cooling	Forced Air Cooling		
Color	RAL 5013 Cobalt Blue		
Dimensions (L*W*H)mm	925 x 535 x 1190		
Netweight (Approx in Kg's)	250	310	325
<b>ENVIRONMENT</b>			
Temperature Operating	0-40° C		
Max. Relative humidity@25° (non condensing)	Upto 95%		
Max. Altitude above sea level without de-rating	upto 1000 mtr		

Stock Availability: 8 to 10 weeks from date of Purchase Order  
Technical specifications are subject to change without prior notice

System Rating (kVA/kW)	105kVA/84kW	120kVA/96kW	150kVA/120kW	200kVA/160kW
Open circuit voltage	750V			1150V
Maximum PV Power	105kW	120kW	150kW	200kW
Charge Controller	MPPT Charge Controller			
MPPT Voltage Range	700 - 830	700 - 830	700 - 830	950 - 1120
Switching Element	IGBT			
Type of Charger	MPPT			
Charger Efficiency	>95%			
<b>GRID</b>				
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)			
Input Frequency	50Hz ± 6%			
<b>BATTERY</b>				
Battery Voltage	480VDC			
Grid charger type	Bi-Directional			
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (upto inverter kVA Capacity)			
Battery Type	Lead Acid/SMF			
<b>INVERTER</b>				
Switching Element	IGBT			
Output wave form	Pure Sine Wave			
Output Nominal Voltage	415VAC ±2%, 3Ph			
Output Fequency	50Hz ±1%			
Load Power Factor	0.6 lag to 1 (within VA and kW rating)			
Inverter Peak Efficiency	90%			
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%			
Galvanic isolation	Inbuilt isolation transformation inverter output			
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec			
<b>PROTECTION</b>				
Protection	Input Under and Over voltage, Input Under and Over Fequency, Output Overload, Output short circuit, Output over and Under Voltage			
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage			
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>				
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)			
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging			
Alarm	Audible alarm for fault conditions and warnings			
<b>CONFIGURATION</b>				
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)			
Parameter Setting	All main Parameters can be set through LCD Display			
Bypass	Manual bypass switch available for maintenance and service			
<b>ENCLOSURE</b>				
Degree of protection	IP 20			
Cooling	Forced Air Cooling			
Color	RAL 5013 Cobalt Blue			
Dimensions (L*W*H)mm	1000 x 1000 x 1700			
Netweight (Approx in Kg's)	710	780	840	910
<b>ENVIRONMENT</b>				
Temperature Operating	0-40° C			
Max. Relative humidity@25° (non condensing)	Upto 95%			
Max. Altitude above sea level without de-rating	upto 1000 mtr			

Stock Availability: 8 to 10 weeks from date of Purchase Order  
Technical specifications are subject to change without prior notice

System Rating (kVA/kW)		250kVA/200kW
Open circuit voltage		1150V
Maximum PV Power		250kW
Charge Controller		MPPT Charge Controller
MPPT Voltage Range		950 - 1120
Switching Element		IGBT
Type of Charger		MPPT
Charger Efficiency		>95%
<b>GRID</b>		
Input Supply		415 VAC, 3 Phase, 4 wire (+15% , -15%)
Input Frequency		50Hz ± 6%
<b>BATTERY</b>		
Battery Voltage		672VDC
Grid charger type		Bi-Directional
Charging current from grid		15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (upto inverter kVA Capacity)
Battery Type		Lead Acid/SMF
<b>INVERTER</b>		
Switching Element		IGBT
Output wave form		Pure Sine Wave
Output Nominal Voltage		415VAC ±2%, 3Ph
Output Frequency		50Hz ±1%
Load Power Factor		0.6 lag to 1 (within VA and kW rating)
Inverter Peak Efficiency		90%
Vth with 100% linear load		Mains mode: Same as Grid inverter mode <3%
Galvanic isolation		Inbuilt isolation transformation inverter output
Overload conditions		110% for 60 sec / 125% for 10 sec/150% for 1 sec
<b>PROTECTION</b>		
Protection		Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage
		Over Temperature Array Reverse Polarity, Battery Over and Under voltage
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>		
Display Parameter		Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)
LED Indication		Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging
Alarm		Audible alarm for fault conditions and warnings
<b>CONFIGURATION</b>		
Modes		2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)
Parameter Setting		All main Parameters can be set through LCD Display
Bypass		Manual bypass switch available for maintenance and service
<b>ENCLOSURE</b>		
Degree of protection		IP 20
Cooling		Forced Air Cooling
Color		RAL 5013 Cobalt Blue
Dimensions (L*W*H)mm		1260 x 1104 x 1850
Netweight (Approx in Kg's)		1200
<b>ENVIRONMENT</b>		
Temperature Operating		0-40° C
Max. Relative humidity@25° (non condensing)		Upto 95%
Max. Altitude above sea level without de-rating		upto 1000 mtr

Stock Availability: 8 to 10 weeks from date of Purchase Order  
Technical specifications are subject to change without prior notice

# SOLAR NXE

## Run Everything Everytime

Solar NXE range from Luminous allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, Solar NXE is available in 5kVA.



2 Years  
Warranty



Max PV Capacity  
Utilization



Multicolor  
LCD Display



**User Settable Saving Modes**  
SL-1, SL-2, SL-3 Modes  
UPS and Normal Modes



**Max PV Capacity Utilization**  
Connect Solar Panels upto 5400Wp

6:00

### Multicolor LCD Display

A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.



### BIS Certified

BIS Certified BIS certified as per IS/IEC standards



### Smart Solar Optimization

Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
SOLAR NXE 5KVA	150Ah x 4	590Wp x 10 Nos.	2(S) 5(P)	400

## Solar NXE



## Technical Specifications

Model Name	SOLAR NXE 5KVA
Capacity (kVA)	5KVA
Nominal Battery Voltage (Vdc)	48V
Output Waveform	Sine Wave
<b>SOLAR PHOTOVOLTAIC INPUT</b>	
Type of Charger	PWM
Maximum PV power	5400Wp
Solar Input Voltage range (Voc)	100V
Charge Controller Rating	70A
<b>GRID INPUT</b>	
Input Supply Phase	Single Phase
Operating Voltage range	100V-280V
<b>BATTERY</b>	
Battery Charging Current from Solar	Default: 40A (User settable: 5A- 50A)
Battery Charging Current from Mains	Default: 16A, (User settable: 5A- 24A)
Battery Charging Stages	Bulk, Boost, Float
Battery Types Supported	Tubular/VRLA/Flat Plate
<b>INVERTER</b>	
Switching Element	MOSFET
Nominal Output Voltage (V)	230Vac
Output Waveform	Sine Wave
Nominal Frequency	50 Hz
Nominal Output Current	17.7A
Output Voltage Distortion(THD)	< 3%
Overload at nominal output voltage	>110%
<b>SYSTEM DATA</b>	
Transfer Time	<20mSec
Protection	Overload, Short Circuit, Low Battery Cut-Off, Over Temperature, PV Reverse
Display Parameters	AC Mains Voltage, Running Load %, Battery Input Voltage, Battery Charging/Discharging Current, Solar kWh Used, Solar Status, Fault Status, Low Battery, Output Voltage
Indications	LCD Backlight Indications: Red- Any Fault, Yellow- Solar + inverter (No AC Mains), Green- AC Mains Available LED Indications: On/off Switch, UPS/INV mode enable /disable, Charging current LC/HC, Power saving
<b>ENVIRONMENT</b>	
IP Protection Level	IP20
Operating Temperature	0-45 °C
Cooling	Forced Cooling
Max. Relative Humidity @ 25 °C	5% - 95% Non-Condense
Max. Altitude above sea level without de-rating (m)	2000 Mtr
<b>GENERAL</b>	
Dimension (LxWxH) [mm]	277 x 410 x 470
Net Weight (Kg)	44kg

Technical specifications are subject to change without prior notice.

# SOLAR NXE PRO

## Run Everything Everytime

Solar NXE PRO range from Luminous comes with in-built MPPT technology, that helps in converting 30% more power from solar panels as compared to PWM solar inverters. It is available in 15kVA.



2 Years  
Warranty



Max PV Capacity  
Utilization



Multicolor  
LCD Display



**User Settable Saving Modes**  
SL-1, SL-2, SL-3, SL-4 Modes  
UPS and Normal Modes



**Max PV Capacity Utilization**  
Connect Solar Panels upto 16500Wp

6:00

### Multicolor LCD Display

A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.

**MPPT**

### Maximum Power Point Tracking

MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



### Smart Solar Optimization

Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
SOLAR NXE PRO 15KVA	150Ah x 20	590Wp x 27 Nos.	9 (S) 3 (P)	1200

**Solar NXE PRO**



## Technical Specifications

Model Name	SOLAR NXE PRO 15KVA
Capacity (kVA)	15KVA
Nominal Battery Voltage (Vdc)	240V
Output Waveform	Sine Wave
<b>SOLAR PHOTOVOLTAIC INPUT</b>	
Type of Charger	MPPT
Maximum PV power	16500W
Solar Input Voltage range (Voc)	550V
Solar Input Voltage range (Vmp)	440V
No. of MPPT Channels	1
<b>GRID INPUT</b>	
Input Supply Phase	Single Phase
Operating Voltage range	100V-280V
<b>BATTERY</b>	
Battery Charging Current from Solar	Default: 40A (User settable: 5A- 50A)
Battery Charging Current from Grid	12A / 16A
Battery Charging Stages	3
Battery Types Supported	Lead Acid
<b>INVERTER</b>	
Switching Element	IGBT
Control	PWM
Nominal Output Volage (V)	230V+3%
Output Supply Phase	Single Phase
Nominal Frequency	50Hz+1Hz
Nominal Output Current	52.2
Output Voltage Distortion (THD)	< 3%
<b>SYSTEM DATA</b>	
Transfer Time	<40mSec
Protection	Overload,Battery low, Over temperature, Short circuit, Mains MCB Trip, PV reverse
Display Parameters	AC Mains voltage, O/P Load in %, Battery Input voltage,Battery Charging/ Discharging current (Bar Graph), Solar KWH used, Solar Status, Warning or protection status
Indications	On/Off Switch, UPS/INV mode enable /disable Charging current LC/HC, Power saving
<b>ENVIRONMENT</b>	
IP Protection Level	IP20
Operating Temperature	- 10 TO 45 °C
Storage Temperature	- 10 TO 60 °C
Cooling	Forced cooling by fan
Max. Relative Humidity @ 25 °C	5% - 95% Non-Condense
<b>GENERAL</b>	
Dimension (LxWxH) [mm]	642*276*509
Net Weight (Kg)	99.9 Kg

Technical specifications are subject to change without prior notice.

# SOLARVERTER PRO PCU

## Superior Performance

Solarverter PRO range from Luminous allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, Solarverter PRO is available from 2kVA to 10.1kVA.



3 Years  
Warranty



Smart Solar  
optimization



User Controller  
Settings



**MPPT** **Maximum Power Point Tracking**  
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



**User-friendly LCD Display**  
A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.



**Guaranteed Safety**  
Comprehensive protection features include short-circuit, reverse polarity, battery over-charge etc.



**Remote Monitoring**  
Multiple modes of connectivity for remote monitoring enables keeping track of solar generation and proactive maintenance



**Smart Solar Optimization**  
Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

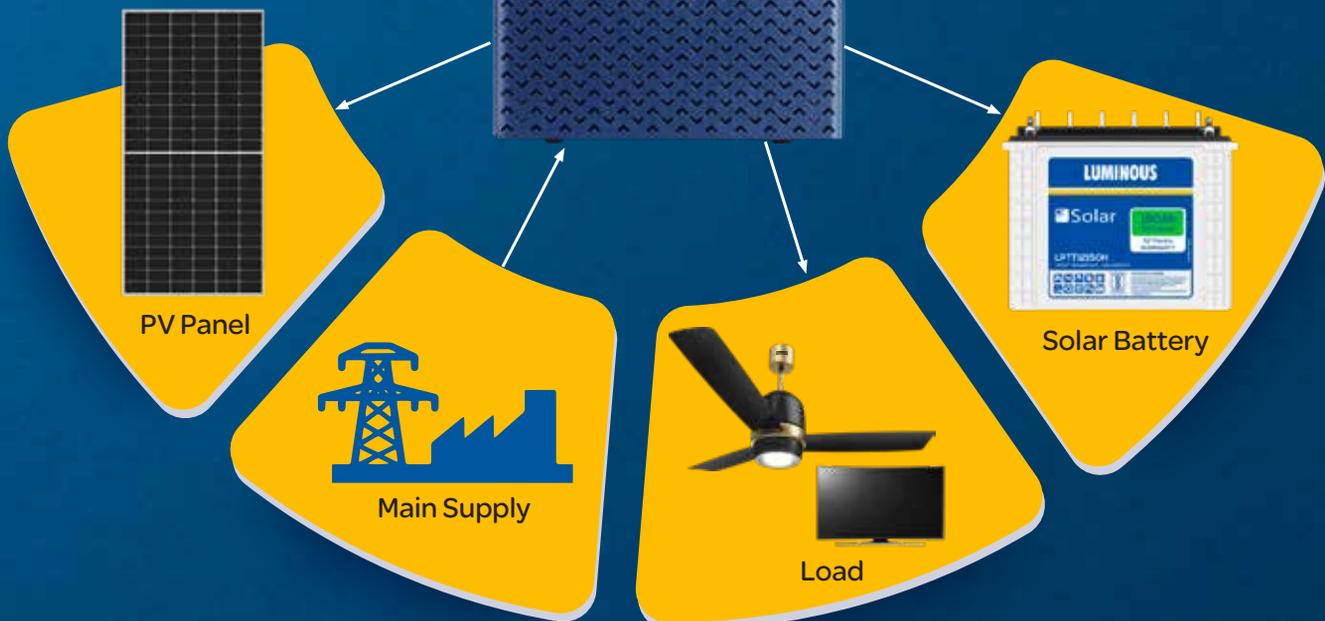
## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
SOLARVERTER PRO 2KVA <sub>eco</sub>	150Ah x 2	590Wp*4 Nos.	2(S) 2(P)	160
SOLARVERTER PRO 3KVA <sub>eco</sub>	150Ah x 3	590Wp*6 Nos.	2(S) 3(P)	240
SOLARVERTER PRO 3.5KVA	150Ah x 4	590Wp*6 Nos.	3(S) 2(P)	280
SOLARVERTER PRO 5KVA	150Ah x 4	590Wp*9 Nos.	3(S) 3(P)	400
SOLARVERTER PRO 6KVA	150Ah x 8	590Wp*12 Nos.	4(S) 3(P)	480
SOLARVERTER PRO 7.5KVA <sub>eco</sub>	150Ah x 8	590Wp*14 Nos.	7(S) 2(P)	600
SOLARVERTER PRO 10.1KVA <sub>eco</sub>	150Ah x 10	590Wp*18 Nos.	6(S) 3(P)	800

## Solarverter PRO PCU



\*Wi-Fi Dongle to be purchased separately (optional)



## Technical Specifications

Model Name	SOLARVERTER PRO 2KVA eco	SOLARVERTER PRO 3KVA eco	SOLARVERTER PRO 3.5KVA
Capacity (kVA)	2kVA	3kVA	3.5kVA
Nominal Battery Voltage (Vdc)	24V	36V	48V
Output Waveform	Sinewave		
<b>SOLAR PHOTOVOLTAIC INPUT</b>			
Type of Charger	MPPT		
Maximum PV power	2000W	3000W	3500W
Solar Input Voltage (Voc)	55V-107V	75V-150V	130V-220V
Solar Input Voltage range (Vmp)	45V-85V	60V-120V	110V-180V
No. of MPPT Channels	1		
<b>GRID INPUT</b>			
Input Supply Phase	Single Phase		
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac		
Mains mode ( Unregulated UPS Mode)	110V-280Vac		140V-280V
<b>BATTERY</b>			
No. of Batteries	2	3	4
Battery Charging Current from Solar	30A		
Battery Charging Current from Grid	0A, 14A, 17A, 20A		0A, 4A-20A (user settable)
Charging Stages	Boost, Absorption, Float		
Type of Battery	Tubular/SMF/Flat		
<b>INVERTER</b>			
Switching Element	MOSFET		
Control	16 Bit DSP controlled		32 Bit DSP Controlled
Nominal Output Voltage (V)	230V ± 5%		230V ± 5%
Output Supply Phase	1 Phase 2 Wire		
Nominal Frequency	50 Hz		
Nominal Output Current	7.5A	11A	12.5A+/-1A
Output Voltage Distortion(THD)	<= 3%		<= 5%
<b>SYSTEM DATA</b>			
Transfer Time	<20 mS		
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery		
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode		
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode		
<b>ENVIRONMENT</b>			
IP Protection Level	IP20		
Operating Temperature	0-45 °C		
Storage Temperature	0-50°C		
Cooling	Forced Air Cooling		
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)		
<b>GENERAL</b>			
Dimension (L*W*H) [mm]	300x432x284	300x432x429	590x433x523
Net Weight (kg)	27.7kg	31.5kg	47.5kg

Technical specifications are subject to change without prior notice.

## Technical Specifications

Model Name	SOLARVERTER PRO 5KVA	SOLARVERTER PRO 6KVA
Capacity (kVA)	5kVA	6kVA
Nominal Battery Voltage (Vdc)	48V	96V
Output Waveform	Sinewave	
<b>SOLAR PHOTOVOLTAIC INPUT</b>		
Type of Charger	MPPT	
Maximum PV power	5000W	6000W
Solar Input Voltage (Voc)	130V-220V	180V-250V
Solar Input Voltage range (Vmp)	110V-180V	150V-200V
No. of MPPT Channels	1	
<b>GRID INPUT</b>		
Input Supply Phase	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode ( Unregulated UPS Mode)	140V-280V	
<b>BATTERY</b>		
No. of Batteries	4	8
Battery Charging Current from Solar	30A	50A
Battery Charging Current from Grid	0A, 4A-20A (user settable)	0A, 14A, 17A, 20A
Charging Stages	Boost, Absorption, Float	
Type of Battery	Tubular/SMF/Flat	
<b>INVERTER</b>		
Switching Element	MOSFET	IGBT
Control	32 Bit DSP Controlled	
Nominal Output Voltage (V)	230V $\pm$ 5%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	17.5A+/-1A	20A+/-1A
Output Voltage Distortion(THD)	$\leq$ 5%	
<b>SYSTEM DATA</b>		
Transfer Time	$<$ 20 mS	
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery	
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
<b>ENVIRONMENT</b>		
IP Protection Level	IP20	
Operating Temperature	0-45 °C	
Storage Temperature	0-50°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
<b>GENERAL</b>		
Dimension (L*W*H) [mm]	511x300x484	620x300x487
Net Weight (kg)	54 kg	58 kg

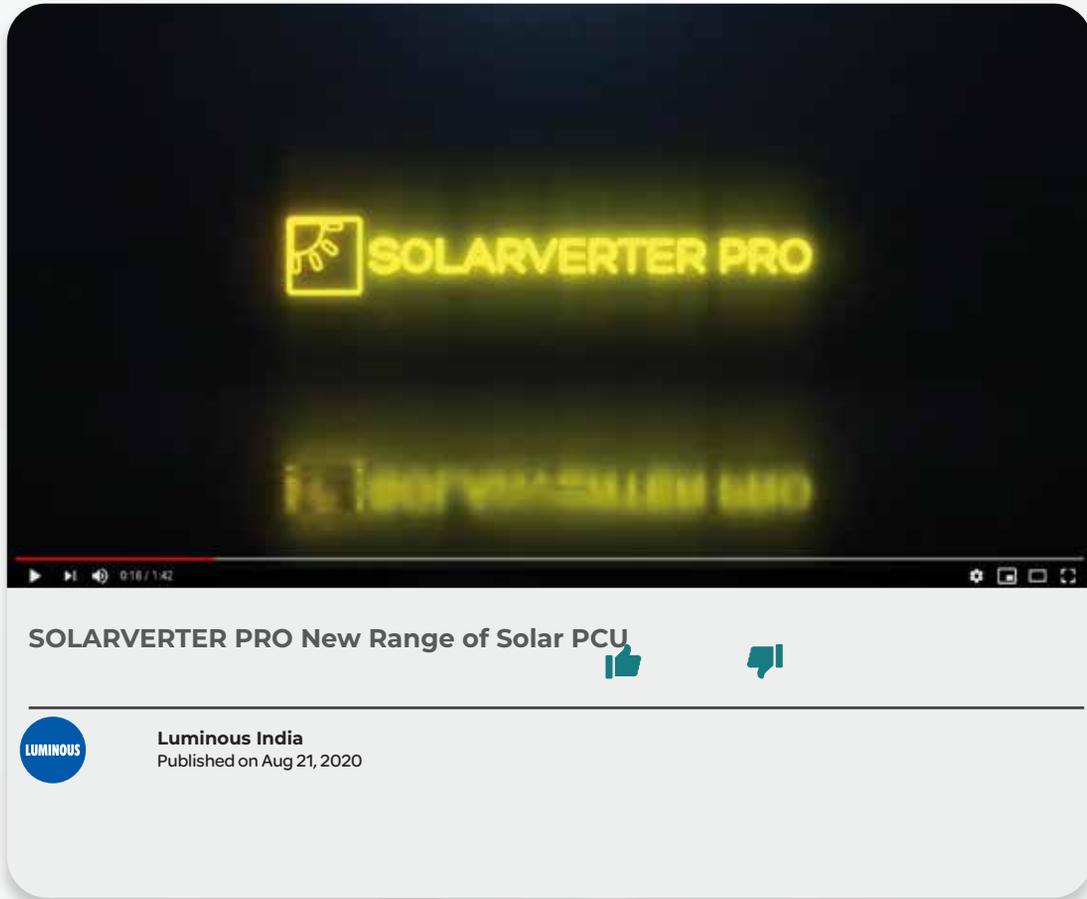
Technical specifications are subject to change without prior notice.

## Technical Specifications

Model Name	SOLARVERTER PRO 7.5KVA eco	SOLARVERTER PRO 10.1KVA eco
Capacity (kVA)	7.5kVA	10.1kVA
Nominal Battery Voltage (Vdc)	96V	120V
Output Waveform	Sinewave	
<b>SOLAR PHOTOVOLTAIC INPUT</b>		
Type of Charger	MPPT	
Maximum PV power	7500W	10000W
Solar Input Voltage (Voc)	200V-400V	200V-400V
Solar Input Voltage range (Vmp)	150V-320V	150V-320V
No. of MPPT Channels	1	
<b>GRID INPUT</b>		
Input Supply Phase	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode ( Unregulated UPS Mode)	140V-280V	
<b>BATTERY</b>		
No. of Batteries	8	10
Battery Charging Current from Solar	30A	
Battery Charging Current from Grid	0A, 4A-20A (user settable)	
Charging Stages	Boost, Absorption, Float	
Type of Battery	Tubular/SMF/Flat	
<b>INVERTER</b>		
Switching Element	IGBT	
Control	32 Bit DSP Controlled	
Nominal Output Voltage (V)	230V ± 5%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	26A+/-1A	34A+/-1A
Output Voltage Distortion(THD)	≤ 5%	
<b>SYSTEM DATA</b>		
Transfer Time	<20 mS	
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery	
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
<b>ENVIRONMENT</b>		
IP Protection Level	IP20	
Operating Temperature	0-45 °C	
Storage Temperature	0-50°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
<b>GENERAL</b>		
Dimension (L*W*H) [mm]	690x400x500	740x400x580
Net Weight (kg)	78 kg	101 kg

Technical specifications are subject to change without prior notice.

For more information



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Videos & more product information.

# SOLARVERTER PCU

## Superior Performance

Solarverter range from Luminous allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, Solarverter is available in 2kVA to 5kVA.



3 Years  
Warranty



Smart Solar  
optimization



User Controller  
Settings



**Customisable Saving Modes**  
Solar, Solar+Grid, Grid+Solar



**Max Capacity Utilization**  
Connect Solar Panels equivalent to  
Solar  
Inverter's VA ratings



**User-friendly LCD Display**  
A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.



**BIS Certified**  
BIS Certified BIS certified  
as per IS/IEC standards

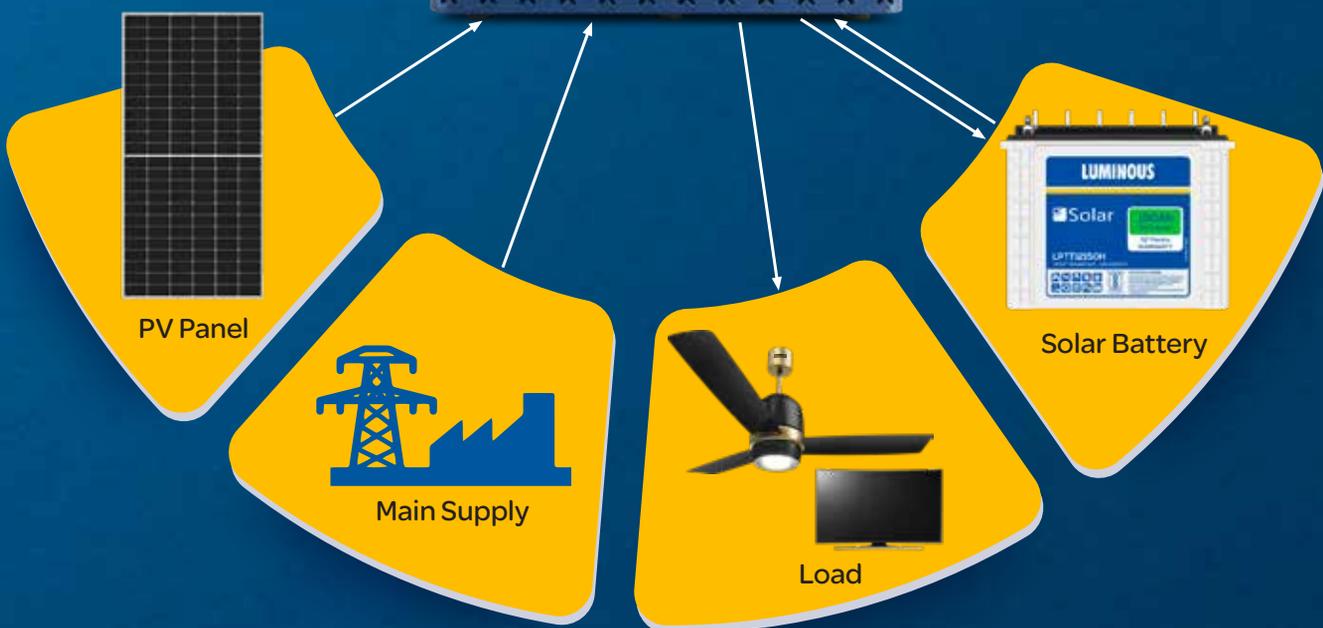


**Smart Solar Optimization**  
Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
SOLARVERTER 2KVA	150Ah x 2	590Wp x 4 Nos.	4 (P)	160
SOLARVERTER 3KVA	150Ah x 4	590Wp x 6 Nos.	2 (S) 3 (P)	240
SOLARVERTER 5KVA	150Ah x 4	590Wp x 10 Nos.	2 (S) 5 (P)	400

**Solarverter PCU**



## Technical Specifications

Model Name	SOLARVERTER 2KVA	SOLARVERTER 3KVA	SOLARVERTER 5KVA
Capacity (kVA)	2kVA	3kVA	5kVA
Nominal Battery Voltage (Vdc)	24V	48V	48V
Output Waveform	Sine Wave		
<b>SOLAR PHOTOVOLTAIC INPUT</b>			
Type of Charger	PWM		
Maximum PV power	2000W	3000W	5000W
Solar Input Voltage range (Voc)	36V-60V	72V-120V	65V-120V
Charge Controller Rating	55A	45A	70A
<b>GRID INPUT</b>			
Input Supply Phases	Single Phase		
Operating Voltage range	140V-290V		
Nominal Grid Current (import)	18	9	18
<b>BATTERY</b>			
Battery Charging Current from Solar	30A		
Battery Charging Current from Mains	0A,15A,20A		
Battery Charging Stages	Boost, Absorption, Float		
Nominal Grid Current (import)	Tubular/SMF/Flat Plate		
<b>UPS</b>			
Switching Element	MOSFET		
Control	32 Bit DSP controlled		
Nominal Output Voltage (V)	230V ± 5%		
Output Waveform	Pure Sine Wave		
Nominal Frequency	50 Hz		
Nominal Output Current	7A	11A	17A
Output Voltage Distortion(THD)	< 3%		
Overload at nominal output voltage	>100% for 12 Secs 5 times retry, 200% for 5 Secs		
<b>SYSTEM DATA</b>			
Transfer Time	<20 mS		
Protection	Reverse Polarity; Surge Protection; Over Voltage; Current Limit; Over/Under Frequency; Short Circuit; Over Temperature		
Display Parameters	Battery Side: Battery Charging/Discharging Status   PV Side: Current, Power   Grid Side: Voltage, Current Load Side: Load in %		
Indications	System Power On, Inverter ON(Load On Inverter), Solar Available/Solar Charging, Load On Grid/Grid Charging, Battery Under Voltage, System Trip/Fail		
<b>ENVIRONMENT</b>			
IP Protection Level	IP-20		
Operating Temperature	0-45 °C		
Cooling	Forced Air Cooling		
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)		
Max. Altitude above sea level without de-rating (m)	1000 m		
<b>GENERAL</b>			
Dimension (WxDxH) [mm]	300 x 326 x 284	300 x 352 x 429	300 x 417 x 415
Net Weight (Kg)	25kg	31.5kg	38kg

Technical specifications are subject to change without prior notice.

For more information



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# NXP PRO 3500

## Superior Performance

NXP PRO 3500 from Luminous allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, NXP PRO 3500 is available in 3kVA.



3 Years  
Warranty



Pure Sine  
Wave Output



1.5 Hp  
submersible pump



**Customisable Saving Modes**  
Solar, Solar+Grid, Grid+Solar

### MPPT

**Maximum Power Point Tracking**  
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.



### User-friendly LCD Display

A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.



### BIS Certified

BIS Certified BIS certified as per IS/IEC standards



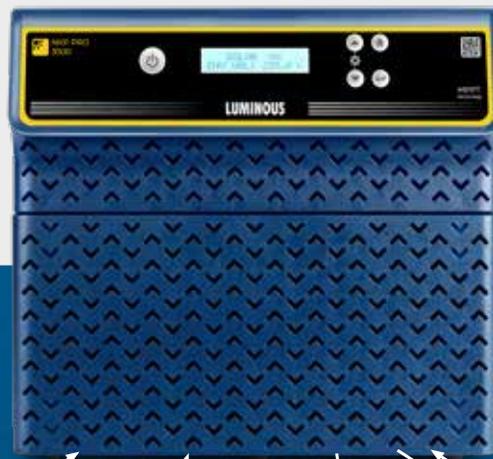
### Smart Solar Optimization

Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
NXP PRO 3500	150Ah x 2	550Wp x 4 Nos.	2(S) 2(P)	160

**NXP PRO 3500**



## Technical Specifications

Model Name	NXP PRO 3500			
Nominal Battery Voltage (Vdc)	24V			
Capacity (VA)	3000VA			
Output Waveform	Sine Wave			
<b>SOLAR PHOTOVOLTAIC INPUT</b>				
Charge Controller Type	MPPT			
Charge Controller Rating	50A			
Maximum PV Power	2000Wp			
Input Voltage range (Voc)	55V - 107V			
<b>GRID INPUT</b>				
Operating Voltage Range	90V-290V			
<b>GRID OUTPUT</b>				
No Load Output	230V +/- 10V			
Output frequency battery mode	50 Hz +/- 0.5Hz			
Inverter Efficiency	>80%			
<b>USER SELECTABLE SWITCHES</b>				
Mode Selections	Solar/Solar+Grid/Grid+Solar			
Battery Type Selections	Tubular/Flat Plate/SMF			
<b>MAINS CHARGING CURRENT</b>				
Solar Mode	0A*			
Solar + Grid Mode	10A±2A			
Grid + Solar Mode	15A±2A			
<b>BATTERY</b>				
No. of Batteries	2			
Battery Charging Current	0A,10A,15A			
Type of Battery Supported	Tubular/Flat Plate/SMF			
<b>PROTECTIONS</b>				
Overload	>100%			
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown			
Indications	Mains Available, Solar Charging, Grid Charging, Power Saving, System On, Low Battery, Overload			
<b>DISPLAY INDICATIONS</b>		<b>LED INDICATIONS</b>		<b>LCD DISPLAY</b>
System ON indication	System ON LED Steady		Mains Available, Power Saving, Solar Current, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown	
Mains ON indication	ON Mains LED steady			
Charging ON indication	ON Mains LED steady + CHG. LED Steady			
Low battery pre-alarm indication	System ON LED Steady + Battery Low LED Blinking			
Low battery indication	Battery Low LED Steady			
Battery Charged Indication	ON Mains LED steady + CHG. LED Off			
Overload Indication	Overload LED Steady			
Short circuit indication in UPS mode	Overload LED Blinking/(ON Mains & Overload LED) Blinking			
DC overload indication	ON Mains LED + Charge LED Blinking			
Thermistor Open/Short Indication	ON Mains LED & Overload LED Steady			
Output Feedback open/Reverse	ON Mains LED & Overload LED Blinking			
Battery Charging Through Solar	Solar Charging LED Blinking			
Power Saving Mode	Power Saver Steady + Solar Chg. LED Blinking/Steady			
Battery Charging Through Solar + Mains	ON Mains LED + Charge LED Steady + Solar Charging LED Blinking			
No Load Shutdown	System ON LED Blinking			
Solar Over Current	Solar Charging LED Blink Faster			
<b>GENERAL</b>				
Net Weight (Kg)	26.18			
Gross weight (Kg)	29			
Dimensions LxWxH (mm)	300X410.7 X 309			

Technical specifications are subject to change without prior notice.

# NXP 3500

## Superior Performance

NXP 3500 from Luminous allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, NXP 3500 is available in 3kVA.



3 Years  
Warranty



Pure Sine  
Wave Output



1.5HP  
submersible pump



**Customisable Saving Modes**  
Solar, Solar+Grid, Grid+Solar



**Guaranteed Safety**

Comprehensive protection features include short-circuit, reverse polarity, battery over-charge etc.



**User-friendly LCD Display**

A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.



**BIS Certified**

BIS Certified BIS certified as per IS/IEC standards



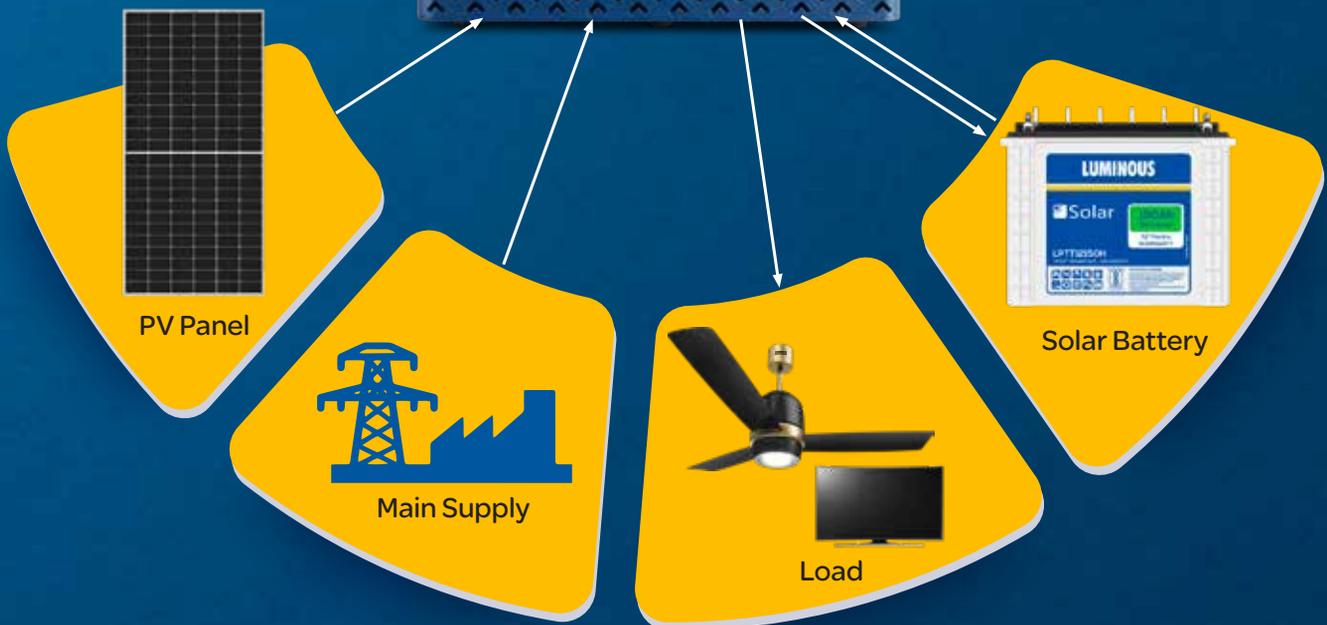
**Smart Solar Optimization**

Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
NXP 3500 3KVA	150Ah x 2	550Wp x 4 Nos.	4 (P)	160

**NXP 3500**



## Technical Specifications

Model Name	NXP 3500			
Nominal Battery Voltage (Vdc)	24V			
Capacity (VA)	3000VA			
Output Waveform	Sine Wave			
<b>SOLAR PHOTOVOLTAIC INPUT</b>				
Charge Controller Type	PWM			
Charge Controller Rating			50A	
Maximum PV Power			2000Wp	
Input Voltage range (Voc)			36V-60V	
<b>GRID INPUT</b>				
Operating Voltage Range	90V-290V			
<b>GRID OUTPUT</b>				
No Load Output	230V +/- 10V			
Output frequency battery mode	50 Hz +/- 0.5Hz			
Inverter Efficiency	>80%			
<b>USER SELECTABLE SWITCHES</b>				
Mode Selections	Solar/Solar+Grid/Grid+Solar			
Battery Type Selections	Tubular/Flat Plate/SMF			
<b>MAINS CHARGING CURRENT</b>				
Solar Mode	0A*			
Solar + Grid Mode	10A±2A			
Grid + Solar Mode	15A±2A			
<b>BATTERY</b>				
No. of Batteries	2			
Battery Charging Current	0A,10A,15A			
Type of Battery Supported	Tubular/Flat Plate/SMF			
<b>PROTECTIONS</b>				
Overload	>100%			
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown			
Indications	Mains Available, Solar Charging, Grid Charging, Power Saving, System On, Low Battery, Overload			
<b>DISPLAY INDICATIONS</b>		<b>LED INDICATIONS</b>		<b>LCD DISPLAY</b>
System ON indication	System ON LED Steady		Mains Available, Power Saving, Solar Current, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown	
Mains ON indication	ON Mains LED steady			
Charging ON indication	ON Mains LED steady + CHG. LED Steady			
Low battery pre-alarm indication	System ON LED Steady + Battery Low LED Blinking			
Low battery indication	Battery Low LED Steady			
Battery Charged Indication	ON Mains LED steady + CHG. LED Off			
Overload Indication	Overload LED Steady			
Short circuit indication in UPS mode	Overload LED Blinking/(ON Mains & Overload LED) Blinking			
DC overload indication	ON Mains LED + Charge LED Blinking			
Thermistor Open/Short Indication	ON Mains LED & Overload LED Steady			
Output Feedback open/Reverse	ON Mains LED & Overload LED Blinking			
Battery Charging Through Solar	Solar Charging LED Blinking			
Power Saving Mode	Power Saver Steady + Solar Chg. LED Blinking/Steady			
Battery Charging Through Solar + Mains	ON Mains LED + Charge LED Steady + Solar Charging LED Blinking			
No Load Shutdown	System ON LED Blinking			
Solar Over Current	Solar Charging LED Blink Faster			
<b>GENERAL</b>				
Net Weight (Kg)	24.2 kg			
Gross weight (Kg)	25.7 kg			
Dimensions LxWxH (mm)	300x291x284mm			

Technical specifications are subject to change without prior notice.

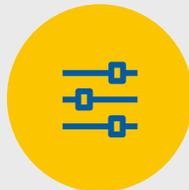
# NXG INVERTERS

## For Savings & Backup

NXG range is a solar inverter range that intelligently uses grid and solar power. With ability to operate in a wide voltage range, NXG is the ideal starter solar solution for homes.



3 Years  
Warranty



Smart Saving  
modes



Max Capacity  
Utilization



**Customisable Saving Modes**  
Solar, Solar+Grid, Grid+Solar



**Max Capacity Utilization**  
Connect Solar Panels equivalent to  
Solar  
Inverter's VA ratings



**Intelligent Load Sharing**  
Maximum utilization of solar  
power and battery



**Powerful Charging  
on Low Voltage**  
Charges even at 90V  
making it ideal for areas  
having low voltage  
problem



**Informative LCD Display**  
View important parameters  
such as daily solar generation  
data, battery status, alerts, etc.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Inverter	Solar Battery	PV Panel Watt		
NXG 850e	150Ah x 1	170Wp x 3 Nos.	3 (P)	40
NXG 1150e	150 Ah x 1	170Wp x 5 Nos.	5 (P)	70
NXG 1450e	150Ah x 1	170Wp x 6 Nos.	6 (P)	90
NXG 1850e	150 Ah x 2	590 Wp x 3 Nos.	3 (P)	120
NXG 2350	150Ah x 2	590Wp x 4 Nos.	4 (P)	160

**NXG Solar Inverter**



## Technical Specifications

Model Name	NXG 850e	NXG 1150e	NXG 1450e	NXG 1850e	NXG 2350
Nominal Battery Voltage (Vdc)	12V	12V	12V	24V	24V
Capacity (VA)	500VA	850VA	1100VA	1500VA	2000VA
Output Waveform	Sine Wave				
<b>SOLAR PHOTOVOLTAIC INPUT</b>					
Charge Controller Type	PWM				
Charge Controller Rating	30A	50A	60A	40A	55A
Maximum PV Power	500Wp	850Wp	1100Wp	1500Wp	2000Wp
Input Voltage range (Voc)	18V-25V	18V-25V	18V-25V	36V-60V	36V-60V
<b>GRID INPUT</b>					
Operating Voltage Range	90V-290V				
<b>GRID OUTPUT</b>					
No Load Output	230V +/- 10V				
Output frequency battery mode	50 Hz +/- 0.5Hz				
Inverter Efficiency	>80%				
<b>USER SELECTABLE SWITCHES</b>					
Mode Selections	Solar/Solar+Grid/Grid+Solar				
Battery Type Selections	Tubular/Flat Plate/SMF				
<b>MAINS CHARGING CURRENT</b>					
Solar Mode	0A*				
Solar + Grid Mode	10A±2A		15A±2A		
Grid + Solar Mode	15A±2A		20A±2A		
<b>BATTERY</b>					
No. of Batteries	1		2		
Battery Charging Current	0A,10A,15A		0A,15A,20A		
Type of Battery Supported	Tubular/Flat Plate/SMF				
<b>PROTECTIONS</b>					
Overload	>105%				
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown				
Indications	Mains Available, Solar Charging, Grid Charging, Power Saving, System On, Low Battery, Overload				
<b>DISPLAY INDICATIONS</b>			<b>LED INDICATIONS</b>		<b>LCD DISPLAY</b>
System ON indication	System ON LED Steady		Mains Available, Power Saving, Solar Current, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown		
Mains ON indication	ON Mains LED steady				
Charging ON indication	ON Mains LED steady + CHG. LED Steady				
Low battery pre-alarm indication	System ON LED Steady + Battery Low LED Blinking				
Low battery indication	Battery Low LED Steady				
Battery Charged Indication	ON Mains LED steady + CHG. LED Off				
Overload Indication	Overload LED Steady				
Short circuit indication in UPS mode	Overload LED Blinking/(ON Mains & Overload LED) Blinking				
DC overload indication	ON Mains LED + Charge LED Blinking				
Thermistor Open/Short Indication	ON Mains LED & Overload LED Steady				
Output Feedback open/Reverse	ON Mains LED & Overload LED Blinking				
Battery Charging Through Solar	Solar Charging LED Blinking				
Power Saving Mode	Power Saver Steady + Solar Chg. LED Blinking/Steady				
Battery Charging Through Solar + Mains	ON Mains LED + Charge LED Steady + Solar Charging LED Blinking				
No Load Shutdown	System ON LED Blinking				
Solar Over Current	Solar Charging LED Blink Faster				
<b>GENERAL</b>					
Net Weight (Kg)	7.5 kg	10.2 kg	12.8 kg	14.6 kg	18.5 kg
Gross weight (Kg)	8.2 kg	11.1kg	14.2 kg	16.0 kg	20 kg
Dimensions LxWxH (mm)	320x252x130mm	320x302x130 mm	320x320x150mm		320x275x150 mm

Technical specifications are subject to change without prior notice.

For more information



Luminous NXG Inverters | A new world of Solar Technology  
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Published on 3 Mar 2022

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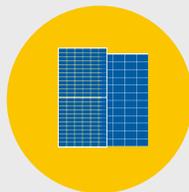
# NXG PRO INVERTERS

## With Proven MPPT Technology

NXG PRO is an intelligent solar inverter which comes with in-built MPPT technology helping in converting 30% more power from solar panels as compared to PWM charge controllers.



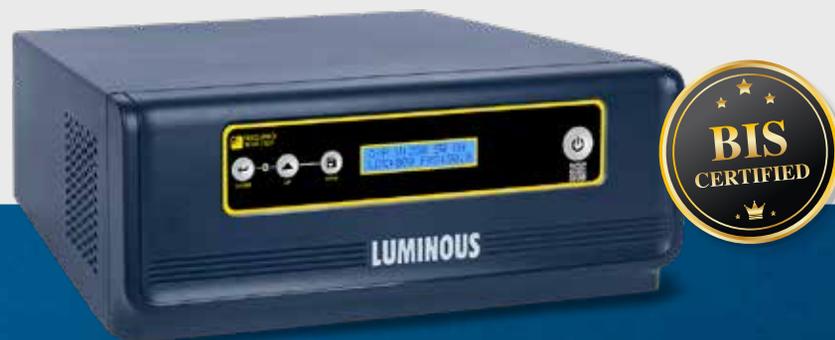
3 Years  
Warranty



Compatible with  
both 12V & 24V  
Solar Panels



Max Capacity  
Utilization



**Customisable Saving Modes**  
Solar, Solar+Grid, Grid+Solar



**Max Capacity Utilization**  
Connect Solar Panels equivalent to  
Solar  
Inverter's VA ratings



**Compatible With Both  
12V & 24V Solar Panels**  
Gives you the flexibility to  
connect either 12V or 24V  
solar panels as per your need



**Powerful Charging  
on Low Voltage**  
Charges even at 90V  
making it ideal for areas  
having low voltage  
problem



**Informative LCD Display**  
View important parameters  
such as daily solar generation  
data, battery status, alerts, etc.

**Solar Estimation Chart**

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Inverter	Solar Battery	PV Panel Watt		
NXG PRO 1KVA/12V	150Ah x 1	590Wp x 2 Nos.	2(P)	80
NXG PRO 1KVA/24V	150 Ah x 2	590Wp x 2 Nos.	2 (P)	80

**NXG Pro Solar Inverter**

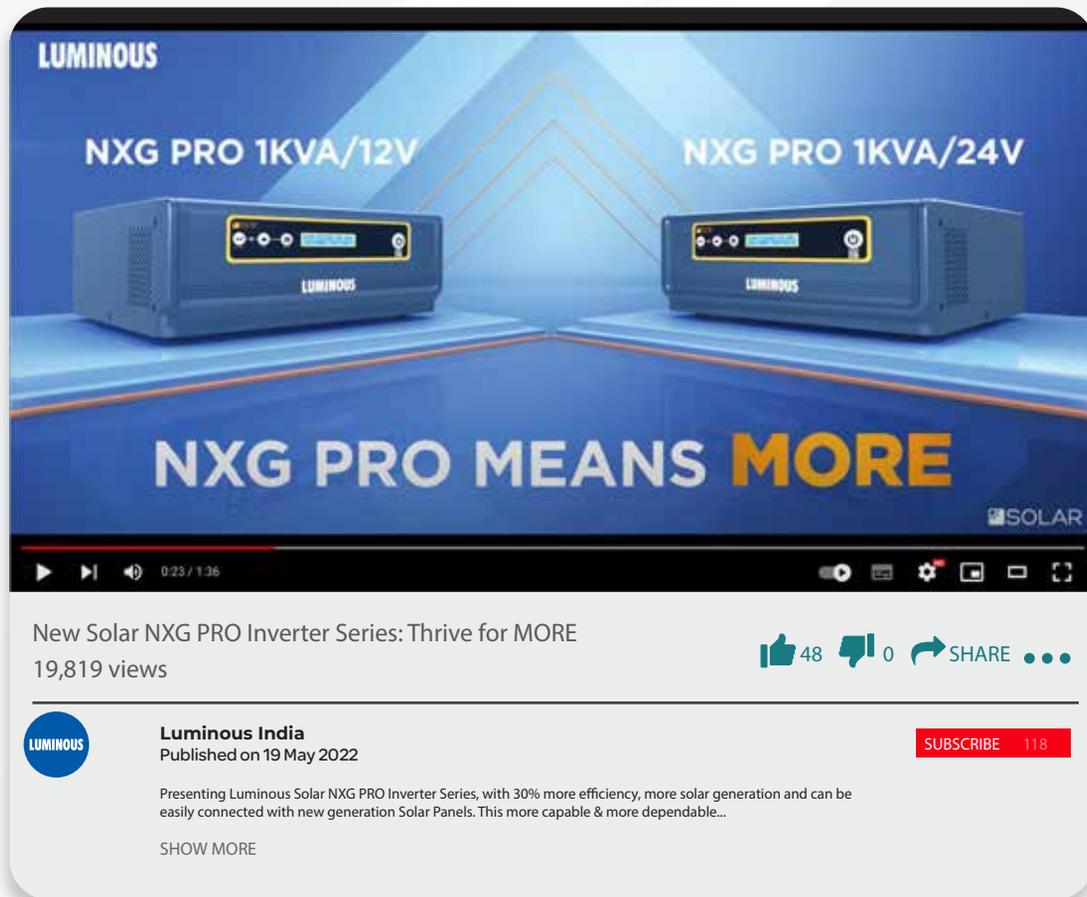


## Technical Specifications

Model Name	NXG PRO 1KVA/12V	NXG PRO 1KVA/24V
Nominal Battery Voltage (Vdc)	12V	24V
Capacity (kVA)	1 kVA	
Output Waveform	Pure Sine Wave	
<b>SOLAR PHOTOVOLTAIC INPUT</b>		
Charge Controller Type	MPPT	
Maximum PV power	1000Wp	
Input Voltage range (Voc)	35V-55V	
<b>GRID INPUT</b>		
Operating Voltage Range	90V-290V	
<b>GRID OUTPUT</b>		
No Load Output	230V +/- 10V	
Output frequency battery mode	50 Hz +/- 0.5Hz	
Inverter Efficiency	>80%	
<b>USER SELECTABLE FROM FRONT SWITCH</b>		
Mode Selections	Solar/Solar+Grid/Grid+Solar	
Battery Type Selections	Tubular/SMF/Flat	
No Load Shutdown	Enable/Disable	
<b>MAINS CHARGING CURRENT</b>		
Solar Mode	0A*	
Solar + Grid Mode	15A±2A	
Grid + Solar Mode	20A±2A	
<b>BATTERY</b>		
No. of Batteries	1	2
Battery Charging Current from Solar	30A±2A	
Battery Charging Current from Grid	0A/15A/20A	
Type of Battery Supported	Tubular/SMF/Flat	
<b>PROTECTIONS</b>		
Overload	>102%	
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown	
Alarms	Battery low pre-alarm, Battery low, Short-circuit, Overload, Faults	
<b>LCD DISPLAY</b>		
LCD Display Messages Battery, Overload, No Load Shutdown	Mains Available, Power Saving, Solar Current, Solar Voltage, Solar Power, System On, Grid Charging, Low	
<b>ENVIRONMENT</b>		
Ambient operating temperature	0-45°C	
Storage Temperature	0-50°C	
Humidity	Upto 95%(Non-Condensed)	
Cooling system	Forced Cooling	
<b>STANDARD COMPLIANCE</b>		
Certifications	BIS certified as per IS/IEC standards	
<b>GENERAL</b>		
Net weight (Kg)	14.1 kg	
Gross weight (Kg)	15.5 kg	
Dimensions LxWxH (mm)	356 X 320 X 138 mm	

Technical specifications are subject to change without prior notice.

For more information



The image shows a YouTube video player interface. The video content features two Luminous NXG PRO inverters, one labeled 'NXG PRO 1KVA/12V' and the other 'NXG PRO 1KVA/24V'. Below the inverters, the text 'NXG PRO MEANS MORE' is displayed in large, bold letters. The video player includes a progress bar at 0:23 / 1:36 and a control bar with play, volume, and share icons. Below the video, the title 'New Solar NXG PRO Inverter Series: Thrive for MORE' is shown with 19,819 views, 48 likes, and 0 dislikes. The channel name 'Luminous India' is listed with a 'SUBSCRIBE' button showing 118 subscribers. A description follows: 'Presenting Luminous Solar NXG PRO Inverter Series, with 30% more efficiency, more solar generation and can be easily connected with new generation Solar Panels. This more capable & more dependable...' and a 'SHOW MORE' link.

[youtube/user/myluminousindia](https://youtube.com/user/myluminousindia)



Subscribe to our Channel

Follow our Social Media Channels & Visit our Website for Blogs,  
Videos & more product information.

# WI-FI DONGLE

## Seamless Connectivity

Makes your solar inverter smart with connectivity option, assisting in viewing and tracking solar generation, battery backup, charging time, fault indications, etc. (Products Supported: GTIs, Solarverter PRO, Solar Hybrid TX)



### Real-Time Monitoring

Get fault alerts and live system updates anytime through our in-house ConnectX app.



### Plug and Play

Easy to install — just plug it in and start monitoring instantly.



### Status Indicators

LED indicators show real-time working status at a glance.



### Convenient Debugging

One-touch Reset button lets you send data quickly and simplify troubleshooting.

Scan & install  
**ConnectX**  
App



Android  
**ConnectX**  
by Luminous



iOS  
**ConnectX**  
by Luminous

## Technical Specifications

Model Name	Sync-X	S3-Wi-Fi-ST	S4-Wi-Fi-ST
<b>Electrical characteristics</b>			
DC Supply	5V	5V	5V
Current consumption	0.13 Amp	<0.4 Amp	<0.4 Amp
Average power consumption	< 0.65W	≤ 2 W	≤ 2 W
Wi-fi Standard	IEEE 802.11 b/g/n	802.11b/g/n(2.4G)	802.11b/g/n(2.4G)
Bluetooth	Bluetooth 42		
<b>Interface</b>			
Physical	4-Pin circular connector	External 4-Pin Port	USB
Data transfer rate	9600bps		
Communication interface	RS 485, Bluetooth	RS485 (internal communication between inverters- upto 10 inverters)	RS485 (internal communication between inverters- upto 10 inverters)
<b>Environmental</b>			
Operating temperature range	-10 C to + 55C	-30 ~ +65°C	- 30 ~ +65°C
Storage temperature range	-40C to +85C	- 40 ~ +70°C	- 40 ~ +70°C
Relative humidity	0% to 95%	5% - 95%,	5% - 95%,
<b>Circular connector</b>			
Type	4-Pin circular connector	4-Pin circular connector	USB
<b>Protections</b>			
Reverse polarity	Yes	Yes	Yes
ESD protection	Yes	Yes	Yes
IP Rating	IP 65	IP 65	IP 65
<b>Physical</b>			
Net weight (gms)	33.5	85	65
Gross weight (gms)	90.5		
Dimensions with Antenna (L x W x H)mm	142 x 26 x 95 (with recommended right angle antenna direction)	133 x 44 x 44	113 x 50 x 34
Connectivity			
Compatible with	Solarverter Pro, NXI, Hybrid TX	NXI models with 4 pin	NXI models with USB

LED indication	Sync-X
Colour	Indication
LED1 (green)	Power indication
LED 2 (orange)	Wi-fi mode LED
LED 3 (Blue)	Signal strength
LED 4 (White)	Modbus communication

		S3-Wi-Fi-ST   S4-Wi-Fi-ST	
		Indication	
Internet Indicators (NET) - Green	Shows the connection status between the data logger and the server.	Flashing	Trying to connect with server
		ON	Successfully connected
		OFF	Abnormal connection
Inverter COM Indicators (COM) - Yellow	Shows the connection status between data logger and the inverter.	Flashing	Trying to connect with inverter
		ON	Successfully connected
		OFF	Abnormal connection
Power Indicator (PWR)- Red	Shows the power supply status of the data logger.	ON	Data logger is powered up normally
		OFF	Data logger is powered up abnormally

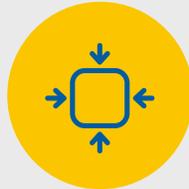
# CHARGE CONTROLLER

## Easy Upgrade To Solar

Luminous Charge controllers provide an easy upgrade to solar



1 Year  
Warranty



Compact  
Design



Automatic Battery  
Detection



### Automatic Battery Detection

Auto-selects between 12V and 24V  
battery for easy, error-free setup



### Efficient Charging

Protects battery health  
with advanced 3-stage  
charging modes.



### Battery Status at a Glance

Tri-color LED indicators  
show battery status instantly.

## Charge Controller



### Technical Specifications

SPECIFICATIONS	SCC1206e		SCC1210e		SCC1220e		SCC1250	
Technology								
System Rating	06A @ 12V / 24V		10A @ 12V / 24V		20A @ 12V / 24V		50A @ 12V / 24V	
Maximum Solar Panel Wattage	120Wp @ 12V	240Wp @ 24V	200Wp @ 12V	400Wp @ 24V	400Wp @ 12V	800Wp @ 24V	1000Wp @ 12V	2000Wp @ 24V
Maximum Solar Panel Voltage(VoC)	25V @ 12V battery	50V @ 24V battery	25V @ 12V battery	50V @ 24V battery	25V @ 12V battery	50V @ 24V battery	25V @ 12V battery	50V @ 24V battery
Operating Voltage	(7V-14V) ±2@12V	(15V-28V) ±2@24V	(7V-14V) ±2@12V	(15V-28V) ±2@24V	(7V-14V) ±2@12V	(15V-28V) ±2@24V	(7V-14V) ±2@12V	(15V-28V) ±2@24V
Boost Voltage: a) For Tubular b) For SMF	14.7V±1%    29.4V±1%		14.7V±1%    29.4V±1%		14.7V±1%    29.4V±1%		14.7V±1%    29.4V±1%	
	14.4V±1%    28.8V±1%		14.4V±1%    28.8V±1%		14.4V±1%    28.8V±1%		14.4V±1%    28.8V±1%	
Float Voltage	13.7V±1%	27.4V±1%	13.7V±1%	27.4V±1%	13.7V±1%	27.4V±1%	13.7V±1%	27.4V±1%
Dimensions (mm)	108 x 38 x 120(L x W x H)		108 x 38 x 120(L x W x H)		108 x 38 x 120(L x W x H)		150 x 48 x 106(L x W x H)	
Wire Size	1.5mm <sup>2</sup> Maximum		2.5mm <sup>2</sup> Maximum		4mm <sup>2</sup> Maximum		10mm <sup>2</sup> Maximum	
Net Weight	130 gms		137 gms		142 gms		335.5 gms	

Technical specifications are subject to change without prior notice.

# CHARGE CONTROLLER

## Easy Upgrade To Solar

Luminous Charge controllers provide an easy upgrade to solar for existing users of DC loads.



1 Year  
Warranty



Battery  
Overcharge Protection



USB  
Port



### Protection Against OverCharge and Reverse Current

Charges batteries from solar panels without permitting overcharge and also prevent reverse current flow at night.



Warranty  
1 Year warranty



### USB Port

Charge your DC devices like Mobile, Tablets etc. directly without using adapter.

## Charge Controller



### Technical Specifications

Model Name	SCC1206NM	SCC1210NM	SCC1220NM
Charge Controller Type	PWM		
Charge Controller Rating	6A @ 12V	10A @ 12V / 24V	20A @ 12V / 24V
Maximum PV Power	125Wp @ 12V	200Wp @ 12V/400Wp @ 24V	400Wp @ 12V/800Wp @ 24V
Input Voltage range (Voc)	17-25	17-25 @ 12V, 36-50 @ 24V	
Input Voltage range (Vmp)	15-21	15-21 @ 12V, 31-39 @ 24V	
Low voltage disconnect			
A) By state of charge	N.A	Available	
B) Controlled by voltage	Available		
Self consumption	Less than 10mA		
Efficiency:			
A) Charging	98.50%		96%
B) Load	98%		96%
Operating temperature range	0°C to 50°C		
Power connections	30 Ampere Terminal		
Battery type selection	Lead Acid & SMF		
Enclosure	ABS Plastic, IP21		
Dimensions (mm)	40 x 60 x 135 (L x W x H)		
Wire size	2.5 sq. mm	4 sq. mm	6 sq. mm
Net weight	275 gms	300 gms	350 gms

Technical specifications are subject to change without prior notice.

# SOLAR BATTERY

## Power Of Performance

Luminous Solar Batteries are C10 rated deep cycle batteries specially designed for longer back up. Range Available - LMLA Tubular 40Ah to 200 Ah



Upto 6 Years\*  
Warranty



Tubular Technology  
For Longer Life



Rugged  
Performance



**Very Low Maintenance**  
Topping up frequency :  
Once in 8 to 10 months



**High Temperature  
Performance**  
Can handle extreme  
weather conditions



**Long Design Life**  
Long cycles (1500@80% DOD,  
5000 @20% DOD)

### Technical Specifications

Model Name	Nominal Voltage	C10 capacity upto 10.5V 27° C	Length 13	Width 13	Height upto float top 13	Dry Weight ±5%	Filled Weight ±5%	Electrolyte Volume 15%
	V	Ah	mm	mm	mm	Kg	Kg	Litre
LPT 1240L	12	40	412	173	267	11	22.5	9.3
LPT 1240H	12	40	412	173	267	12	23.5	9.3
LPT 1280H	12	80	505	220	277	23	37	11.7
LPTT 12100H	12	100	502	191	440	25.5	53	22.2
LPTT 12120H	12	120	502	191	440	27	54.5	22.2
LPTT 12150L	12	150	502	191	440	32.5	58	20.6
LPTT 12150H	12	150	502	191	440	34.5	60	20.6
LPTT 12200L	12	200	502	191	440	40.5	67.5	21.8
LPTT 12200H	12	200	502	191	440	46.5	70.5	19.4

Technical specifications are subject to change without prior notice.

\*STC - Standard Test Conditions

\*T & C apply

COMING SOON

# 3 PHASE SOLAR HYBRID TX MAX INVERTER

10kVA - 30kVA





# India's WIDEST RANGE of Solar Products

Inverters

Batteries

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## LUMINOUS

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