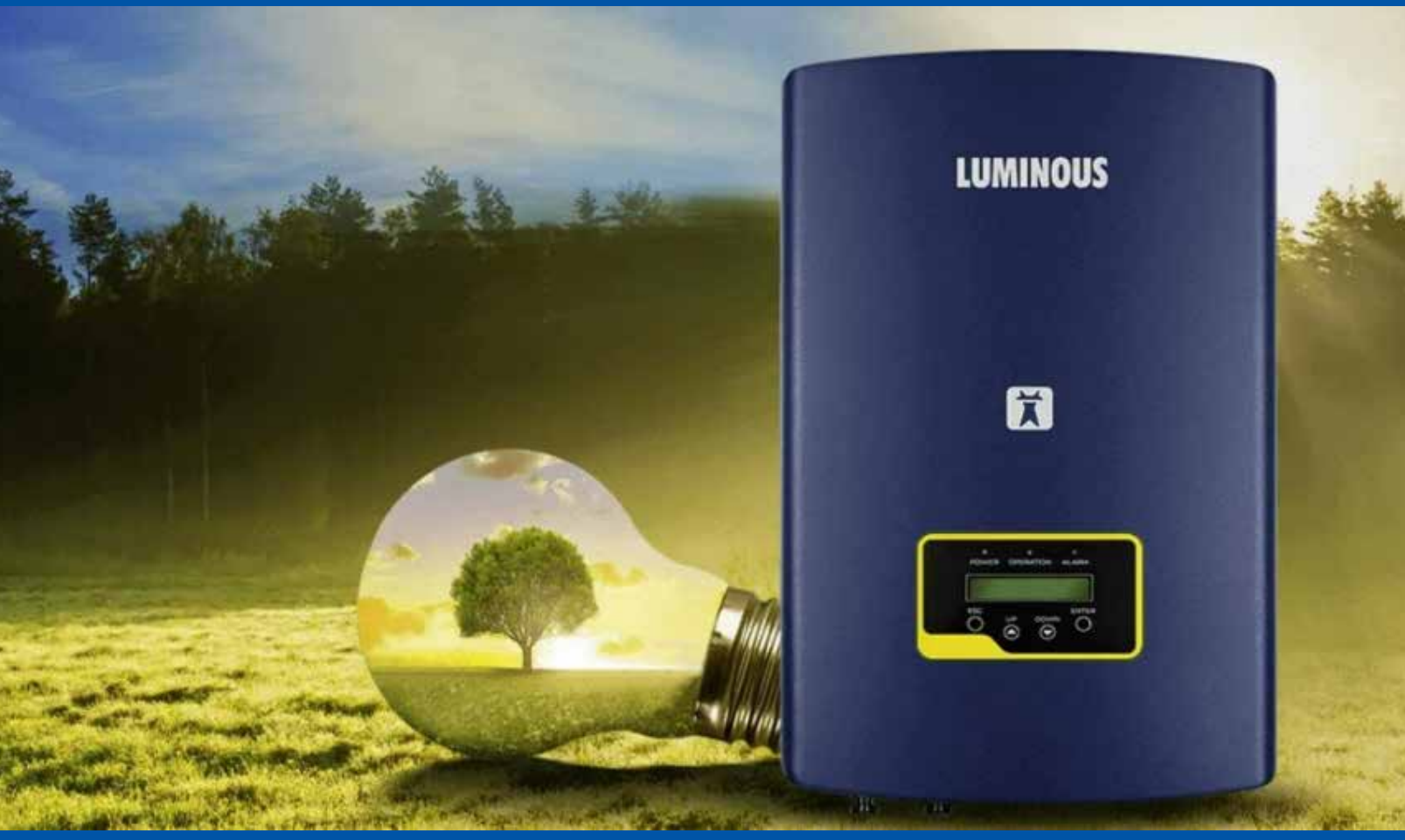
LUMINOUS
SOLAR

# WIDEST RANGE
## OF SOLAR PRODUCTS


PRODUCT CATALOGUE 2024

LUMINOUS
SOLAR




WE MAKE

# SOLAR SIMPLE

FOR YOU

# OUR STORY

Luminous Power Technologies, with 35 years of experience, is a leading and trusted brand known for innovative **Power Back-up Solutions** like Inverters, Batteries, and **Solar Applications**. With a net worth of over INR 1,800 crores and a turnover exceeding INR 4,000 crores, we are the **No.1 player** in the Indian inverter and battery market.

Our vast presence includes 7 manufacturing units, 28+ sales offices across India, and operations in 36+ countries. Our 6,000 employees serve 1,00,000+ channel partners and 70 million customers.

We excel in after-sales service with a PAN India network of 250+ service centers, doorstep service, 24-hour response time, trained professionals, and 24x7 call support—all at competitive rates.

**35**
Years of History

**7**
Factories

**100000+**
Strong Channel Network

**250+**
Service Centers

**70Mn+**
Happy Consumers

**36+**
Countries of Sale

**6000+**
People

**115+**
Strong R&D

**650+**
District

# LUMINOUS SOLAR

Luminous has been at the fore front in **rooftop solar installation in India** with more than 1600 projects across 200+ site through an expert base of 300+ 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 Inverter) and Solar Batteries, Charge Controller & BOS.

**400+ MWp**
Installed capacity

**10000+**
Site survey

**300+**
Expert installers

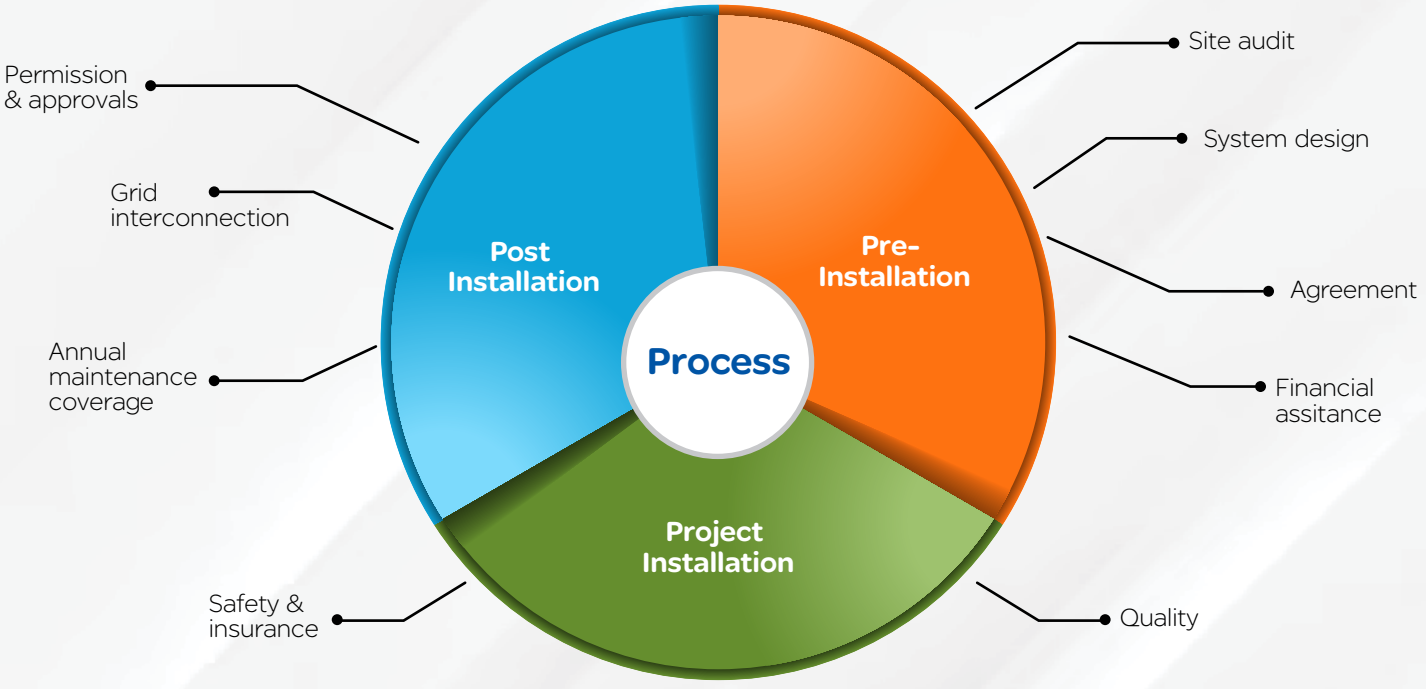
**200+**
Sites

**Making Solar Simple**

- End to End Solar Rooftop Solutions
- One stop destination for all range & needs
- Seamless, expertly - managed installation process.

**Right Design, Designed Right**

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



LUMINOUS SOLAR

# OUR SOLAR EXPERTISE

## DEDICATED TEAM

- Dedicated team of professionals for each stage.
- Site survey, solution design, project installation, operations and after sale teams collaborate for top-tier experience.
- Robust & Maintenance Free Rooftop Solution.

## CONFORMANCE TO GOVT. STANDARDS

- BOS as per Indian Standards, IS :3043.
- Safety from all types of electrical hazards.
- Proper cable sizing to reduce generation losses & optimize performance.

## INSTALLATION

- Installation & commissioning by MNRE approved partners
- Best in class material, as per MNRE standards

## AUDITS

- Multiple audits by Luminous solar experts during & after installation
- Products tested, validated & certified as per IS, IEC, TUV standards.
- Plant remotely monitored for one year.

## SAFETY

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

LUMINOUS SOLAR

# UTILITY SCALE PROJECTS - EXAMPLES

HARIDWAR - 1MW
SECTOR- POWER MFG. PLANT

JAIPUR - 500KW
SECTOR- EXPORT STONE MFG. PLANT

ROHTAK - 200KW
SECTOR- AGRO PRODUCT MFG. PLANT

JALANDHAR - 102KW
SECTOR- PRINTER PLANT

PATIALA - 102KW
SECTOR- METAL PLANT

PANIPAT - 100KW
SECTOR- TEXTILE FIRM

LUMINOUS SOLAR

# 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 UN-MATCHED 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

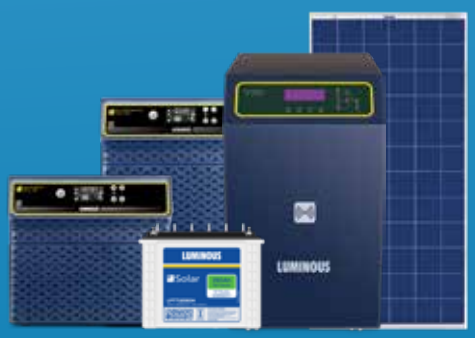
Our robust processes and systems ensure that your Solar Rooftop Solution is of top-notch quality!

04

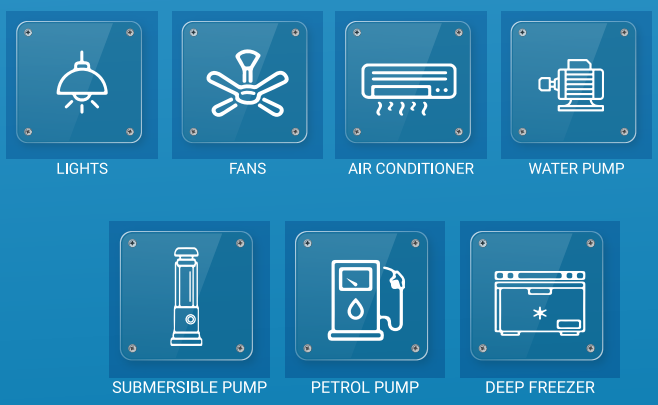
# Our Wide Portfolio catering to every consumer need


For home appliances with short duty cycle


OFF GRID SOLAR SOLUTIONS




OFF GRID & HYBRID SOLAR SOLUTIONS




For lighting and cooling equipments with heavy duty cycle


For all kind of loads & duty cycles


ON GRID SOLAR SOLUTIONS

SOLAR

*For Representation Only. Check Inverter Ratings.

LUMINOUS
SOLAR

For Homes & Small Shops

**NXG SERIES**
500VA to 2000VA



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

For Large Residences/Farmhouses,
Offices & Retail Establishments

**SOLARVERTER SERIES**
2KVA/24V & 3KVA/48V

**SOLARVERTER PRO SERIES**
2KVA to 10KVA

For Large Residences/Farmhouses,
Commercial Establishments & Institutions


**GRID TIE INVERTERS**
3KW to 110KW

**HYBRID TX SERIES**
3.75KVA to 5KVA


JAN_24.1

# POLYCRYSTALLINE SOLAR PANEL

## Designed For High Performance

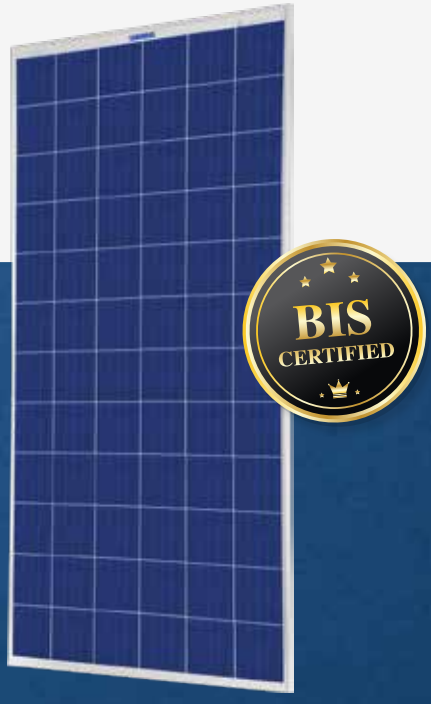
Polycrystalline solar panels consist of multiple photovoltaic cells, and each cell contains silicon crystals. They are a slice cut from a block of silicon, consisting of a number of crystals. These crystals make the pales function like a semiconductor and thus generate electricity. They do not require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

25 Years
Performance Warranty

5 & 12 Years*
Product Warranty

ALMM Approved

Enlisted under
ALMM Order




LOW-LIGHT

**Excellent Low-light Performance**
Built with high quality glass and solar cell surface cooting, especially for performance in low-light conditions.

**Resilience to Extreme Weather**
The robust waterproof, corrosion and torsion resistant design offers protection against wind and snow.

ANTI PID

**Safety and Protection**
Designed to eliminate power loss owing to stray currents

**Advance EVA Encapsulation**
Designed with multi loyer EVA (ethyl vinyl acetate) encapsulation for better module protection.

CONVERSION

**Best in Class Efficiency**
Innovative cell technology ensures optimum solar power generation providing high value for money.

SOLAR

Our solar panels are included in Detailed List of Manufacturers and Models of Solar PV Modules Recommended under ALMM Order

## Electrical Parameters @ STC#

| Model<br>ALMM Reference Model | LUM<br>1240 | LUM<br>1280 | LUM<br>12110 | LUM<br>12170 | ALP<br>335W |
|---|---|---|---|---|---|
| Cell Type | Poly | Poly | Poly | Poly | Poly |
| No. of Cells | 36 | 36 | 36 | 36 | 72 |
| Peak Power PMax (Wp) | 40 | 80 | 110 | 170 | 335 |
| Rated Module Voltage (V) | 12 | 12 | 12 | 12 | 24 |
| Maximum Power Voltage Vmp (V) | 18 | 18 | 18.15 | 18.86 | 38.08 |
| Maximum Power Current Imp (A) | 2.23 | 4.4 | 6.07 | 9.02 | 8.80 |
| Open Circuit Voltage Voc (V) | 22 | 22 | 22.10 | 23.01 | 46.02 |
| Short Circuit Current Isc (A) | 2.42 | 4.8 | 6.35 | 9.61 | 9.43 |
| Module Efficiency (%) | 13.72% | 15.21% | 15.50% | 16.47% | 16.85% |
| Maximum System Voltage (V) | 600V | 600V | 600V | 600V | 1500V |
| Maximum Series Fuse Rating | 12A | 12A | 12A | 12A | 20A |

#STC (1000W/m²), AM1.5, cell temperature 25°C". Power Tolerance : 0/+5%. Power measurement accuracy:±3%

Our solar panels are included in Detailed List of Manufacturers and Models of Solar PV Modules Recommended under ALMM Order

## Mechanical Data

| | | | | | |
|---|---|---|---|---|---|
| Module Dimensions (mm)<br>LxWxT | 435x670<br>x34 | 785x670<br>x34 | 1035x670<br>x34 | 1505x686<br>x35 | 1986x1001<br>x35 |
| Module Weight (kgs) | 3.30 | 6.50 | 8.20 | 11 | 21 |
| IP Rating | IP 65 | IP 65 | IP 65 | IP 65 | IP 67 |
| Cable | No cable | | | 1000mm length cables | |
| Frame | Silver Anodized Aluminium Alloy | | | | |
| Glass | 3.2mm thick high transmission low iron tempered glass, AR coated | | | | |
| Cell Encapsulant | EVA (Ethyelene Vinyl Acetate) | | | | |
| Back Sheet | Composite Film | | | | |
| Maximum Surface Load Capacity | 5400 Pa (Pascals) | | | | |
| Aplication 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 | -0.3%/°C |
| Temp coefficient of Short Circuit Current | 0.07 %/°C | +0.06%/°C |
| Temp coefficient of Power | -0.29 %/°C | -0.35%/°C |

## Warranty and Certifications

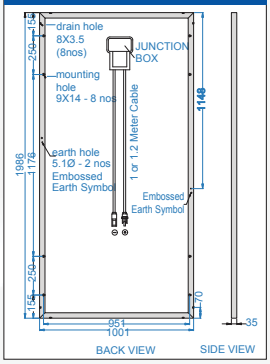
| | | |
|---|---|---|
| Product Warranty** | 5 Years | 12 Years |
| Performance Warranty** | Linear Performance Warranty for 25 Years with 3% for 1st year degradation and 0.70% from year 2 to 25 | |
| Approvals and Certificates | BIS certified as per IS/IEC standards | |

** Refer to Luminous Warranty document for Terms and conditions.

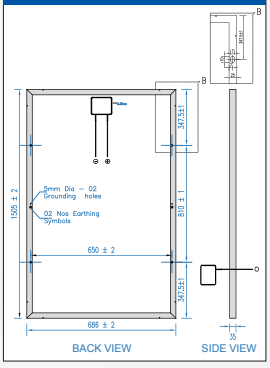
Technical specifications are subject to change without prior notice.

## Solar Module Dimension

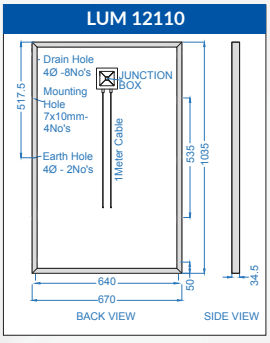
ALP 335W



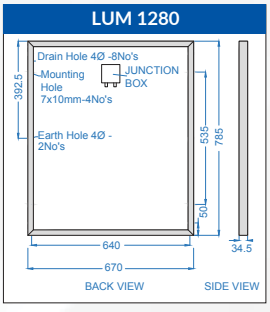

LUM 12170




LUM 12110




LUM 1280




JAN_24_1

# MONO PERC HALF CUT SOLAR PANEL

## Designed For High Performance

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

ALMM Approved

Enlisted under
ALMM Order


LOW-LIGHT

**Excellent Low-light Performance**
Built with high quality glass and solar cell surface cooting, especially for performance in low-light conditions.

**Functions like 2 parallel modules**
Enables the module to perform in PARTIAL SHADOW CONDITIONS with respect to full-cell module

**Lower Resistive Losses**
Boosts module power helping to achieve minimal power loss with respect to previous variant modules

ANTI PID

**PID Resistance**
Technology Designed to eliminate power loss owing to stray currents

**Space Efficient**
They are space-efficient and require the least amount of space as compared to their counterparts.

SOLAR

Our solar panels are included in Detailed List of Manufacturers and Models of Solar PV Modules Recommended under ALMM Order

LUMINOUS SOLAR

## Electrical Parameters @ STC#

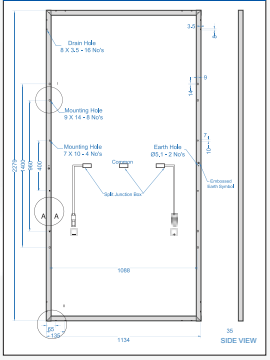
| Model<br>ALMM Reference Model | LUM<br>540DCR | PE-<br>550HM |
|---|---|---|
| Cell Type | Mono PERC Half Cut | Mono PERC Half Cut |
| No. of Cells | 144 | 144 |
| Peak Power PMax (Wp) | 540 | 550 |
| Rated Module Voltage (V) | 24 | 24 |
| Maximum Power Voltage Vmp (V) | 41.92 | 41.95 |
| Maximum Power Current Imp (A) | 12.89 | 13.12 |
| Open Circuit Voltage Voc (V) | 49.40 | 49.80 |
| Short Circuit Current Isc (A) | 13.72 | 13.98 |
| Module Efficiency (%) | 20.89% | 21.28% |
| Maximum System Voltage (V) | 1500V | 1500V |
| Maximum Series Fuse Rating | 25A | 25A |

#STC (1000W/m²), AM1.5, cell temperature 25°C". Power Tolerance : 0/+5%. Power measurement accuracy:±3%

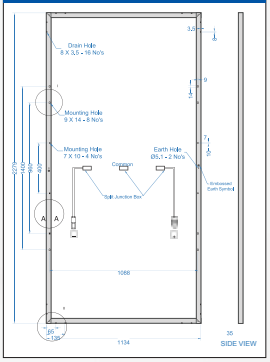
Our solar panels are included in Detailed List of Manufacturers and Models of Solar PV Modules Recommended under ALMM Order

### Solar Module Dimension

PE-550HM



LUM 540DCR



## Mechanical Data

| | |
|---|---|
| Module Dimensions (mm)<br>LxWxT | 2279x1134<br>x35 |
| Module Weight (kgs) | 29 |
| IP Rating | IP 67 |
| Cable | 400mm length<br>cables |
| Frame | Silver Anodized Aluminium Alloy |
| Glass | 3.2mm thick high transmission low iron tempered glass, AR coated |
| Cell Encapsulant | EVA (Ethyelene Vinyl Acetate) |
| Back Sheet | Composite Film |
| Maximum Surface Load Capacity | 5400 Pa (Pascals) |
| Aplication Class | Class A (Safety Class II) |

## Permissible Operating Conditions

| | |
|---|---|
| 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 |
| Temp coefficient of Power | -0.35%/°C |

## Warranty and Certifications

| | |
|---|---|
| Product Warranty** | 12 Years |
| Performance Warranty** | Linear Performance Warranty for 25 Years with 3% for<br>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 3kW to 110 kW.

>99%
>99% Efficiency

8
8 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

LUMINOUS SOLAR

## Solar Estimation Chart

| Solution | | No. of MPPT | Panel Connection Combination per MPPT (Series-Parallel) | Approx. Roof Top Area Required (Sq. ft.) |
|---|---|---|---|---|
| GTI | PV Panel Watt | | | |
| NXI 3kW | 550Wp x 8 No.s | 1 | 8 (S) | 480 |
| NXI 4kW | 550Wp x 10 No.s | 2 | 10 (S) | 600 |
| NXI 5kW | 550Wp x 12 No.s | 2 | 12 (S) | 720 |
| NXI 6kW | 550Wp x 16 No.s | 2 | 16 (S) | 960 |
| NXI 8kW | 550Wp x 20 No.s | 2 | 20 (S) | 1200 |
| NXI 10kW | 550Wp x 26 No.s | 2 | 26 (S) | 1560 |

## Grid Tie System

*WiFi/GSM Dongle to be purchased separately (optional)

## Single Phase

| Model Name | Nxi 130 | Nxi 140 | Nxi 150 |
|---|---|---|---|
| Rated output power (kW) | 3 | 4 | 5 |
| **Input DC** | | | |
| Max. DC Input Power (kW) | 4.5 | 6.0 | 7.5 |
| Max. DC Input Voltage (V) | 600 | 550 | |
| Start-up Voltage [V] | 90 | 100 | |
| MPPT Voltage range (V) | 80 - 500 | 90 - 550 | |
| Max input current per MPPT (A) | 14A | 16A/16A | |
| Number of MPPT a | 1 | 2 | |
| Max Input Strings Number | 1 | 2 | |
| **Output (AC)** | | | |
| Rated output power (kW) | 3 | 4 | 5 |
| Max. output power [kW] | 3.3 | 4.4 | 5 |
| Max. output Current [A] | 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 | | |
| **Efficiency** | | | |
| Max. Efficiency | >97.2 | >97.6 | |
| 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, slanding Protection, Temperature Protection | | |
| **Interface** | | | |
| DC Connection | MC4 Connectors | | |
| Display | LCD 2X 20 Z | LED + Bluetooth App | |
| Datalogger & Communication | RS485/GSM/Wifi* (Optional) | | |
| **General Data** | | | |
| 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) | 7.7 | 8.9 | |
| **Standards** | | | |
| Safety/EMC | BIS Certified as per IS/IEC standards | | |

* Check availablity of GSM or wifi dongle before ordering.
Technical specifications are subject to change without prior notice.

SOLAR

LUMINOUS SOLAR

## 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, Islanding Protection, Temperature Protection, Integrated DC Switch (optional) | | | | | | |
| **Interface** | | | | | | | |
| DC Connection | MC4 Connectors | | | | | | |
| Display | LCD 2X 20Z | | | | | | |
| Datalogger & Communication | RS485/GSM/Wifi* (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 availablity of GSM or wifi dongle before ordering.
Technical specifications are subject to change without prior notice.

## Three Phase

| MODEL | Nxi 325 | Nxi 330 | Nxi 350 | Nxi 3600 | Nxi 380 | Nxi 3100 | Nxi 3110 |
|---|---|---|---|---|---|---|---|
| Rated output power (kW) | 25 | 30 | 50 | 60 | 80 | 100 | 110 |
| **Input DC** | | | | | | | |
| Max. DC Input Power (kW) | 37.5 | 45 | 75 | 90 | 120 | 150 | 165 |
| Max. DC Input Voltage (V) | 1100 | | | | | | |
| Start-up Voltage [V] | 180 | | 195 | | 180 | | |
| MPPT Voltage range (V) | 200-1000 | | | 180 - 1000 | 160 - 1000 | | |
| Max input current per MPPT (A) | 32A/32A/32A | | 5*32A | 6*32A | 3*40A+3*32A | 4*40A+4*32A | |
| Number of MPPT | 3 | | 5 | 6 | | 8 | |
| Max Input Strings Number | 6 | | 10 | 12 | | 16 | |
| **Output (AC)** | | | | | | | |
| Rated output power (kW) | 25 | 30 | 50 | 60 | 80 | 100 | 110 |
| Max. output power [kW] | 27.5 | 33 | 55 | 66 | 88 | 110 | 121 |
| Max. output Current [A] | 27.5 | 33 | 83.3 | 100 | 133.7 | 167.1 | 183.8 |
| 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 | | | | | | |
| **Efficiency** | | | | | | | |
| Max. Efficiency | 98.5% | | 98.7% | | 98.5% | | |
| MPPT Efficiency | >99.5% | | | | 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, Islanding Protection, Temperature Protection, Integrated DC Switch (optional) | | | | | | |
| **Interface** | | | | | | | |
| DC Connection | MC4 Connectors | | | | | | |
| Display | LCD, 2x20 Z | | | | | | |
| Datalogger & Communication | RS485/GSM/Wifi* (Optional) | | | | | | |
| **General Data** | | | | | | | |
| 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 | | 54.5 | | 79.5 | 93 | |
| **Standards** | | | | | | | |
| Safety/EMC | BIS Certified as per IS/IEC standards | | | | | | |

LUMINOUS
SOLAR

## For more information


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

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!

SHOW MORE

**youtube/user/myluminousindia**

YouTube

Subscribe to our Channel

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

# 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 10kVA

2 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

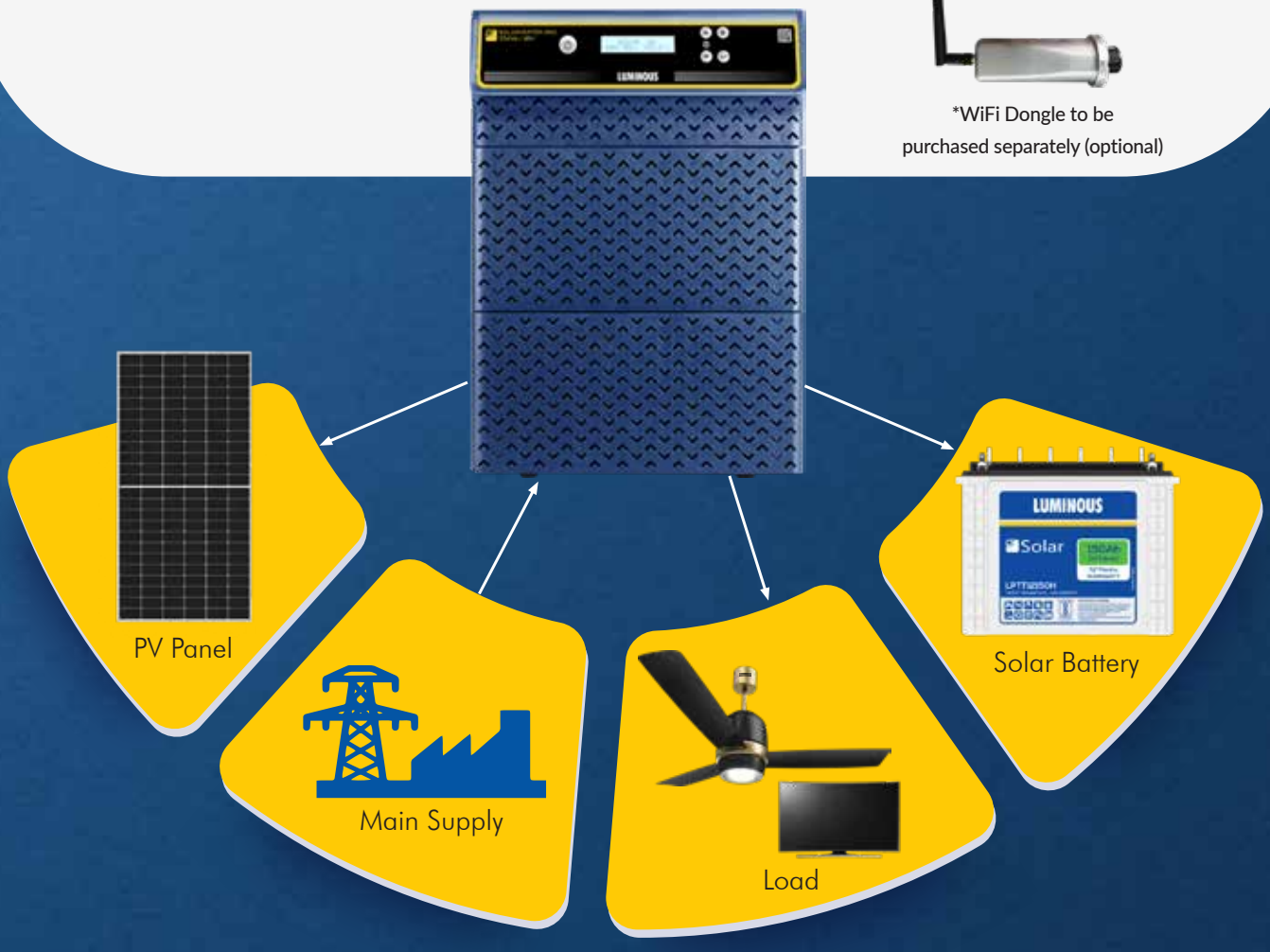
LUMINOUS SOLAR

## 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 | 150Ah x 2 | 550Wp x 4 Nos. | 2 (S) 2 (P) | 120 |
| SOLARVERTER PRO 3KVA | 150Ah x 3 | 550Wp x 6 Nos. | 3 (S) 2 (P) | 240 |
| SOLARVERTER PRO 3.5KVA | 150Ah x 4 | 550Wp x 6 Nos. | 3 (S) 2 (P) | 240 |
| SOLARVERTER PRO 5KVA | 150Ah x 4 | 550Wp x 9 Nos. | 3 (S) 3 (P) | 540 |
| SOLARVERTER PRO 6KVA | 150Ah x 8 | 550Wp x 12 Nos. | 5 (S) 4 (P) | 720 |
| SOLARVERTER PRO 7.5KVA | 150Ah x 8 | 550Wp x 14 Nos. | 7 (S) 2 (P) | 840 |
| SOLARVERTER PRO 10KVA | 150Ah x 10 | 550Wp x 18 Nos. | 9 (S) 2 (P) | 1080 |

# Solarverter PRO PCU

*WiFi Dongle to be purchased separately (optional)



## Technical Specifications

| Model Name | SOLARVERTER PRO 2KVA *eco* | SOLARVERTER PRO 3KVA | SOLARVERTER PRO 3.5KVA |
|---|---|---|---|
| Capacity (kVA) | 2kVA | 3kVA | 3.5kVA |
| Nominal Battery Voltage (Vdc) | 24V | 36V | 48V |
| Output Waveform | Sinewave | | |
| **SOLAR PHOTOVOLTAIC INPUT** | | | |
| Type of Charger | MPPT | | |
| Maximum PV power | 2000W | 3500W | 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 | | |
| **GRID INPUT** | | | |
| Input Supply Phase | Single Phase | | |
| Input Voltage Mains mode (Regulated UPS Mode) | 180-260 Vac | | |
| Mains mode ( Unregulated UPS Mode) | 110V-280Vac | | 140V-280V |
| **BATTERY** | | | |
| 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 | | |
| **INVERTER** | | | |
| 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% |
| **SYSTEM DATA** | | | |
| 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 | | |
| **ENVIRONMENT** | | | |
| 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) | | |
| **GENERAL** | | | |
| Dimension (L*W*H) [mm] | 396x300x270 | 300x417x452 | 590x433x523 |
| Net Weight (kg) | 27.7kg | 32.5kg | 47.5kg |

Technical specifications are subject to change without prior notice.

LUMINOUS SOLAR

## Technical Specifications

| Model Name | SOLARVERTER PRO 5KVA | SOLARVERTER PRO 6KVA |
|---|---|---|
| Capacity (kVA) | 5kVA | 6kVA |
| Nominal Battery Voltage (Vdc) | 48V | 96V |
| Output Waveform | Sinewave | |
| **SOLAR PHOTOVOLTAIC INPUT** | | |
| 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 | |
| **GRID INPUT** | | |
| Input Supply Phase | Single Phase | |
| Input Voltage Mains mode (Regulated UPS Mode) | 180-260 Vac | |
| Mains mode ( Unregulated UPS Mode) | 140V-280V | |
| **BATTERY** | | |
| 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 | |
| **INVERTER** | | |
| Switching Element | MOSFET | 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 | 17.5A+/-1A | 20A+/-1A |
| Output Voltage Distortion(THD) | <= 5% | |
| **SYSTEM DATA** | | |
| 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 | |
| **ENVIRONMENT** | | |
| 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) | |
| **GENERAL** | | |
| 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 | SOLARVERTER PRO 10KVA |
|---|---|---|
| Capacity (kVA) | 7.5kVA | 10kVA |
| Nominal Battery Voltage (Vdc) | 96V | 120V |
| Output Waveform | Sinewave | |
| **SOLAR PHOTOVOLTAIC INPUT** | | |
| Type of Charger | MPPT | |
| Maximum PV power | 7500W | 10000W |
| Solar Input Voltage (Voc) | 250V-400V | 300V-500V |
| Solar Input Voltage range (Vmp) | 200V-400V | 250V-450V |
| No. of MPPT Channels | 1 | |
| **GRID INPUT** | | |
| Input Supply Phase | Single Phase | |
| Input Voltage Mains mode (Regulated UPS Mode) | 180-260 Vac | |
| Mains mode ( Unregulated UPS Mode) | 140V-280V | |
| **BATTERY** | | |
| 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 | |
| **INVERTER** | | |
| 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% | |
| **SYSTEM DATA** | | |
| 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 | |
| **ENVIRONMENT** | | |
| 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) | |
| **GENERAL** | | |
| Dimension (L*W*H) [mm] | 690x400x500 | 740x400x580 |
| Net Weight (kg) | 78 kg | 101 kg |

Technical specifications are subject to change without prior notice.

LUMINOUS
SOLAR

## For more information


SOLARVERTER PRO New Range of Solar PCU

Luminous India
Published on Aug 21, 2020

**youtube/user/myluminousindia**

YouTube

Subscribe to our Channel

Follow our Social Media Channels & Visit our Website for Blogs, 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 and 3kVA models.

2 Years Warranty

Smart Solar optimization

User Controller Settings


### 3 User Settable 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

LUMINOUS SOLAR

## 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 | 550Wp x 4 Nos. | 4 (P) | 120 |
| SOLARVERTER 3KVA | 150Ah x 4 | 550Wp x 6 Nos. | 2 (S) 3 (P) | 240 |

# Solarverter PCU

## Technical Specifications

| Model Name | SOLARVERTER 2KVA | SOLARVERTER 3KVA |
|---|---|---|
| Capacity (kVA) | 2kVA | 3kVA |
| Nominal Battery Voltage (Vdc) | 24V | 48V |
| Output Waveform | Sine Wave | |
| **SOLAR PHOTOVOLTAIC INPUT** | | |
| Type of Charger | PWM | |
| Maximum PV power | 2000W | 3000W |
| Solar Input Voltage range (Voc) | 36V-60V | 72V-120V |
| Charge Controller Rating | 55A | 45A |
| **GRID INPUT** | | |
| Input Supply Phases | Single Phase | |
| Operating Voltage range | 140V-290V | |
| Nominal Grid Current (import) | 18 | 9 |
| **BATTERY** | | |
| Battery Charging Current from Solar | 30A | |
| Battery Charging Current from Mains | 0A,15A,20A | |
| Battery Charging Stages | Boost, Absorption, Float | |
| Battery Types Supported | Tubular/VRLA/Flat Plate | |
| **UPS** | | |
| 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 |
| Output Voltage Distortion(THD) | < 3% | |
| Overload at nominal output voltage | 110-150% for 12 Secs 5 times retry, 200% for 5 Secs | |
| **SYSTEM DATA** | | |
| 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 | |
| **ENVIRONMENT** | | |
| 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 | |
| **GENERAL** | | |
| Dimension (WxDxH) [mm] | 458 x 433 x380 | 485 x 433 x 557 |
| Net Weight (Kg) | 27kg | 35kg |

Technical specifications are subject to change without prior notice.

SOLAR

LUMINOUS
SOLAR

## For more information


SOLARVERTER New Range of Solar PCU

Luminous India
Published on Aug 21, 2020

**youtube/user/myluminousindia**

YouTube

Subscribe to our Channel

Follow our Social Media Channels & Visit our Website for Blogs, 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 3.75KVA & 5KVA.

Remote Monitoring

Savings & Backup Together

Safe and Reliable


**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 amoung 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

SOLAR

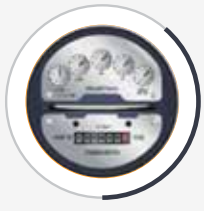
LUMINOUS SOLAR

## 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 3.75KVA | 150Ah x 4 | 550Wp x 4 Nos. | 2 (S) 2 (P) | 120 |
| HYBRID TX 5KVA | 150Ah x 4 | 550Wp x 6 Nos. | 3 (S) 2 (P) | 240 |

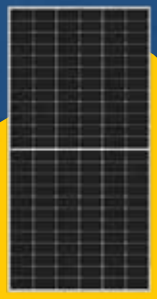
# Hybrid Inverter

Free WiFi Dongle included



Net Meter

Main Supply

PV Panel

Load


Solar Battery

## Technical Specifications

| Model | HYBRID TX 3.75kVA | HYBRID TX 5kVA |
|---|---|---|
| Nominal Battery Voltage (Vdc) | 48V | |
| Output Waveform | Pure Sine Wave | |
| **SOLAR PHOTOVOLTAIC INPUT** | | |
| Type of Charger | MPPT | |
| Maximum PV Power (kW) | 3KW | 4KW |
| Input Voltage Range (Voc) | 65V – 165 V | |
| Input Voltage Range (Vmp) | 65V – 130 V | |
| Maximum I/P Current (Array) | 46A | 61A |
| Maximum MPPT Output current (A) | 60A | 80A |
| Maximum Conversion Efficiency (%) | >95% | |
| **GRID INPUT** | | |
| Input Supply Phase | Single Phase | |
| Grid Voltage Range | 180V - 270V | |
| Nominal Grid Current (import) | 21A | 29A |
| **GRID OUTPUT** | | |
| Grid Current (export) | 12A ± 2A | 16A ± 2A |
| **BATTERY** | | |
| Nominal Battery Voltage | 48VDC | |
| Charging Stages | Boost, Float, Absorption | |
| **INVERTER** | | |
| 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) | 13A | 17A |
| Output Voltage Distortion (THD) | <4% | |
| Overload at nominal output voltage | 110% for 10 minutes, 125% for 1minute, 200% for 5 seconds | |

LUMINOUS SOLAR

## Technical Specifications

| Model | HYBRID TX 3.75kVA | HYBRID TX 5kVA |
|---|---|---|
| **SYSTEM DATA** | | |
| Transfer Time | < 20 mS | |
| Protection | Under/Over voltage protection for Input/Output, Battery & Array; Reverse polarity protection for Array & Battery; Protection for Output Overload, Short circuit and Over Temperature; MCB & Surge protection at Grid/DG Input, Battery, Wrong Wiring, Low Battery, Anti-Islanding Protection | |
| Display Parameters | "Voltage/Current: Array, Battery, Grid, Output; Day kWh, Cumulative kWh, Date, Time " | |
| Indications | Battery Charging/ Discharging, Grid Available, Grid Select, Solar Available, Inverter On, Load On, System on Battery, Low Battery Pre-alarm, Wrong Wiring, Short Circuit Trip, Fault LED Indicator (For Overload, Low Battery, Over Temperature) | |
| | "Battery type, Battery voltage (Boost, Float, Absorption), Priority (SGB/SBG/Solar Only/Grid Feed), Charging Current from Grid, Zero feed/Allow feed in GFM Current Settings" | |
| **INTERFACE** | | |
| DC Connection | MC4 Connectors | |
| Connectivity | WiFi Dongle (optional) | |
| **GENERAL** | | |
| Display / Indications | LCD Display (20*4) / LED Indications | |
| Dimensions (WxDxH in mm) | 300 x 504 x 515 | 350x635x589 |
| Net Weight (kg) | 50 kg | 64 kg |
| Mounting | Surface Mount | |
| Cooling | Air Cooling | |
| Enclosure Protection | IP21 | |
| Galvanic Isolation | Inbuilt Isolation Transformer | |
| Operating Temperature | 0°C - 45°C | |

# 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.

2 Years Warranty

New Saving modes

Max Capacity Utilization


### 3 User Settable 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
90 V

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

LUMINOUS SOLAR

## 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) | 60 |
| NXG 1150e | 150 Ah x 1 | 170Wp x 5 Nos. | 5 (P) | 100 |
| NXG 1450e | 150Ah x 1 | 170Wp x 6 Nos. | 6 (P) | 120 |
| NXG 1850e | 150 Ah x 2 | 550Wp x 3 Nos. | 3 (P) | 180 |
| NXG 2350 | 150Ah x 2 | 550Wp x 4 Nos. | 4 (P) | 240 |

# 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 | | | | |
| **SOLAR PHOTOVOLTAIC INPUT** | | | | | |
| Charge Controller Type | PWM | | | | |
| Charge Controller Rating | 30A | 50A | 60A | 40A | 55VA |
| Maximum PV Power | 500Wp | 850Wp | 1100Wp | 1500Wp | 2000Wp |
| Input Voltage range (Voc) | 18V-25V | 18V-25V | 18V-25V | 36V-60V | 36V-60V |
| **GRID INPUT** | | | | | |
| Operating Voltage Range | 90V-290V | | | | |
| **GRID OUTPUT** | | | | | |
| No Load Output | 230V +/- 10V | | | | |
| Output frequency battery mode | 50 Hz +/- 0.5Hz | | | | |
| Inverter Efficiency | >80% | | | | |
| **USER SELECTABLE SWITCHES** | | | | | |
| Mode Selections | Solar/Solar+Grid/Grid+Solar | | | | |
| Battery Type Selections | Tubular/Flat Plate/VRLA | | | | |
| **MAINS CHARGING CURRENT** | | | | | |
| Solar Mode | 0A* | | | | |
| Solar + Grid Mode | 10A±2A | | 15A±2A | | |
| Grid + Solar Mode | 15A±2A | | 20A±2A | | |
| **BATTERY** | | | | | |
| No. of Batteries | 1 | | | 2 | |
| Battery Charging Current | 0A,10A,15A | | 0A,15A,20A | | |
| Type of Battery Supported | Tubular/Flat Plate/VRLA | | | | |
| **PROTECTIONS** | | | | | |
| 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 | | | | |
| **DISPLAY INDICATIONS** | **LED INDICATIONS** | | | **LCD DISPLAY** | |
| 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 & Overlaod LED Steady | | | | |
| Output Feedback open/Reverse | ON Mains LED & Overlaod 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 | | | | |
| **GENERAL** | | | | | |
| Net Weight (Kg) | 8.2 kg | 11.8 kg | 16.5 kg | 17.1 kg | 18.5 kg |
| Gross weight (Kg) | 9.7 kg | 13 kg | 17.8 kg | 18.5 kg | 20 kg |
| Dimensions LxWxH (mm) | 320x302x130 mm | | | 320x275x150 mm | |

Technical specifications are subject to change without prior notice.

SOLAR

LUMINOUS
SOLAR

For more information


Luminous NXG Inverters | A new world of Solar Technology
19,819 views

48 0 SHARE

Luminous India
Published on 3 Mar 2022

SUBSCRIBE 118

Next in line of the results of advanced engineering at Luminous is India's most dependable range of Solar Inverters. Equipped with ISOT technology, Luminous NXG range of solar inverters are here to enable...

SHOW MORE

**youtube/user/myluminousindia**

YouTube

Subscribe to our Channel

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

# 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.

2 Years Warranty

Compatible with both 12V & 24V Solar Panels

Max Capacity Utilization


### 3 User Settable 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
90 V

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

LUMINOUS SOLAR

## 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 | 550Wp x 2 Nos. | 2(P) | 120 |
| NXG PRO 1KVA/24V | 150 Ah x 2 | 550Wp x 2 Nos. | 2 (P) | 120 |

# NXG Pro Solar Inverter

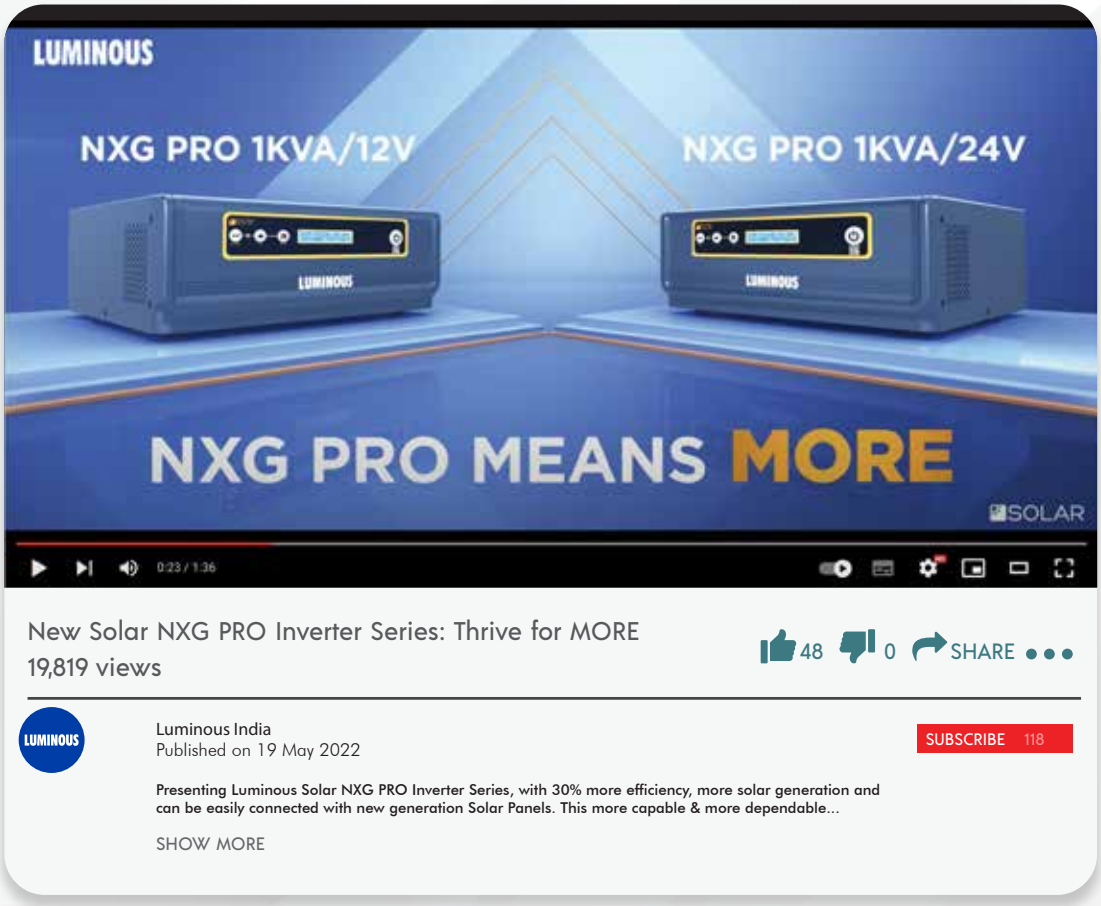
## Technical Specifications

| 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 | |
| **SOLAR PHOTOVOLTAIC INPUT** | | |
| Charge Controller Type | MPPT | |
| Maximum PV power | 1000Wp | |
| Input Voltage range (Voc) | 35V-55V | |
| **GRID INPUT** | | |
| Operating Voltage Range | 90V-290V | |
| **GRID OUTPUT** | | |
| No Load Output | 230V +/- 10V | |
| Output frequency battery mode | 50 Hz +/- 0.5Hz | |
| Inverter Efficiency | >80% | |
| **USER SELECTABLE FROM FRONT SWITCH** | | |
| Mode Selections | Solar/Solar+Grid/Grid+Solar | |
| Battery Type Selections | Tubular/SMF/Flat | |
| No Load Shutdown | Enable/Disable | |
| **MAINS CHARGING CURRENT** | | |
| Solar Mode | 0A* | |
| Solar + Grid Mode | 15A±2A | |
| Grid + Solar Mode | 20A±2A | |
| **BATTERY** | | |
| 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 | |
| **PROTECTIONS** | | |
| Overload | >102% | |
| Protections | Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown | |
| Alarms | Battery low pre-alarm, Battery low, Short-circuit, Overload, Faults | |
| **LCD DISPLAY** | | |
| LCD Display Messages | Mains Available, Power Saving, Solar Current,Solar Voltage, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown | |
| **ENVIRONMENT** | | |
| Ambient operating temperature | 0-45°C | |
| Storage Temperature | 0-50°C | |
| Humidity | Upto 95%(Non-Condensed) | |
| Cooling system | Forced Cooling | |
| **STANDARD COMPLIANCE** | | |
| Certifications | BIS certified as per IS/IEC standards | |
| **GENERAL** | | |
| 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.

LUMINOUS
SOLAR

## For more information




**youtube/user/myluminousindia**

YouTube

Subscribe to our Channel

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

# 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

### 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

LUMINOUS SOLAR

## 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 | 550Wp x 10 Nos. | 2(S) 5 (P) | 600 |

# Solar NXE

## Technical Specifications

| Model Name | SOLAR NXE 5KVA |
|---|---|
| Capacity (kVA) | 5KVA |
| Nominal Battery Voltage (Vdc) | 48V |
| Output Waveform | Sine Wave |
| **SOLAR PHOTOVOLTAIC INPUT** | |
| Type of Charger | PWM |
| Maximum PV power | 5400Wp |
| Solar Input Voltage range (Voc) | 100V |
| Charge Controller Rating | 70A |
| **GRID INPUT** | |
| Input Supply Phase | Single Phase |
| Operating Voltage range | 100V-280V |
| **BATTERY** | |
| 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 |
| **INVERTER** | |
| 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% |
| **SYSTEM DATA** | |
| 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<br>LED Indications: On/off Switch, UPS/INV mode enable /disable, Charging current LC/HC, Power saving |
| **ENVIRONMENT** | |
| 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 |
| **GENERAL** | |
| Dimension (LxWxH) [mm] | 277 x 410 x 470 |
| Net Weight (Kg) | 44kg |

Technical specifications are subject to change without prior notice.

LUMINOUS
SOLAR

For more information


SOLAR NXE

Luminous India
Published on Jun 21, 2023

**youtube/user/myluminousindia**

YouTube

Subscribe to our Channel

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

# 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 1.5kVA.

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

### Multicolor LCD Display

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

### 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

LUMINOUS SOLAR

## 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 | 550Wp x 30 Nos. | 10 (S) 3 (P) | 1800 |

# Solar NXE PRO

## Technical Specifications

| Model Name | SOLAR NXE PRO 15KVA |
|---|---|
| Capacity (kVA) | 15KVA |
| Nominal Battery Voltage (Vdc) | 240V |
| Output Waveform | Sine Wave |
| **SOLAR PHOTOVOLTAIC INPUT** | |
| 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 |
| **GRID INPUT** | |
| Input Supply Phase | Single Phase |
| Operating Voltage range | 100V-280V |
| **BATTERY** | |
| 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 |
| **INVERTER** | |
| 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% |
| **SYSTEM DATA** | |
| 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<br>Charging current LC/HC, Power saving |
| **ENVIRONMENT** | |
| IP Protection Level | IP20 |
| Operating Temperature | - 10 TO 45 °C |
| Storage Temperature | - 10 TO 60 °C |
| Cooling | Forced colling by fan |
| Max. Relative Humidity @ 25 °C | 5% - 95% Non-Condense |
| **GENERAL** | |
| Dimension (LxWxH) [mm] | 642*276*509 |
| Net Weight (Kg) | 99.9 Kg |

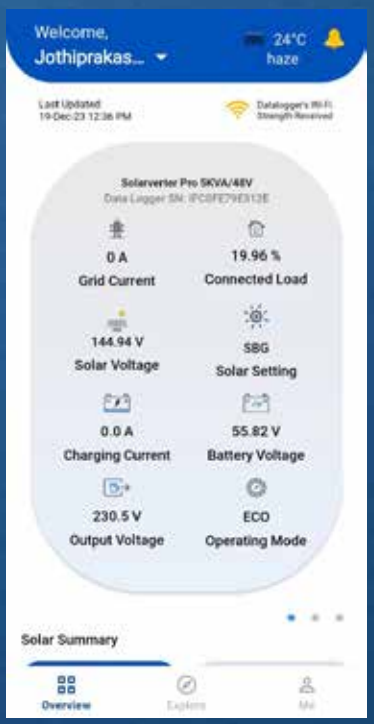
Technical specifications are subject to change without prior notice.

# WIFI DONGLE

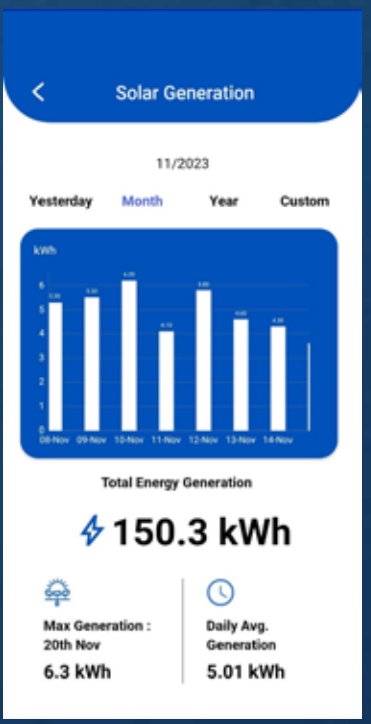
## Seamless Connectivity

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)








**Download and install app**

Android
Connect X

IOS
Connect by Luminous

# 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.

**Solar Estimation Chart**

| Solution | | | Panel Connection Combination (Series-Parallel) | Approx. Roof Top Area Required (Sq. ft.) |
|---|---|---|---|---|
| Solar Charge Controller | DC Voltage | PV Panel Watt | | |
| SCC 1206 | @12V | 110Wp x 1 No.s | 1 (S) | 10 |
| SCC 1210 | @12V | 170Wp x 1 No.s | 1 (S) | 20 |
| SCC 1210 | @24V | 335Wp x 1 No.s | 1 (S) | 40 |
| SCC 1220 | @12V | 170Wp x 2 No.s | 2 (P) | 40 |
| SCC 1220 | @24V | 335Wp x 2 No.s | 2 (P) | 80 |

SOLAR

LUMINOUS SOLAR

# 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 upto10.5V 27O C | Length ± 3 | Width ± 3 | Height upto float top ±3 | Dry Weight ±5% | Filled Weight ±5% | Electrolyte Volume ±5% |
|---|---|---|---|---|---|---|---|---|
| | 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 12135H | 12 | 135 | 502 | 191 | 440 | 30.5 | 59 | 23 |
| 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 12165H | 12 | 165 | 502 | 191 | 440 | 36.5 | 63 | 21.4 |
| LPTT 12180L | 12 | 180 | 502 | 191 | 440 | 40 | 64 | 19.4 |
| 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

SOLAR

LUMINOUS
SOLAR

**Widest range of solar solutions**

**Installation available**

**25 years* warranty**

**All India service**

**999 02 999 02**

JAN_24_1


# India's WIDEST RANGE of Solar Products

**Inverters** **Batteries** **PV Panels**

## LUMINOUS

**Luminous Power Technologies Pvt. Ltd.**

Plot No. 150, Sector 44, Gurugram, Haryana –122003

Customer Care: 99999 33039, E-Mail: care@luminousindia.com

/myluminous | /myluminous | /myluminousindia | www.luminousindia.com

JAN_24_1