SOLAR

LUMINOUS

Luminous Power Technologies Pvt. Ltd.

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

Tel.:+91-124-477 6700, E-Mail: care@luminousindia.com

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

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LUMINOUS

Khushiyon ka ghar

Complete Solar Solutions

Making the World a Better Place with Every Rooftop

SOLAR

PRODUCT CATALOGUE 2022

AUG_22_V3

LUMINOUS

OVER 30 YEARS OF MAKING HOMES HAPPIER

With a legacy of over 30 years in powering households and empowering India, Luminous continues to challenge itself to exceed customers expectations and its true potential.

- 7 Factories
- 28 Sales Offices
- 60000+ Channel Network
- 70+ Mn Happy Consumers
- Expert Craftsmanship
- Top-of-the-line Products

YEARS 30 OF LUMINOUS

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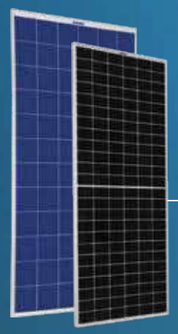
LUMINOUS



Mono PERC Half Cut &
Polycrystalline Panels

40W - 540W

NXG
Inverter

500VA - 1500VA

NXi Grid Tie
Inverter

1kW - 110kW

NXT+ PCU

3.75 kVA - 12.5 kVA

WIDEST RANGE OF SOLAR PRODUCTS

Solarverter
PRO PCU

2kVA, 3kVA

Hybrid
Inverter

3.75kVA, 5kVA

NXG Pro
Inverter

1kVA / 12V, 24V

Solarverter

2kVA, 3kVA

Charge
Controller

12V - 24V

Solar
C10 Rated
Batteries

40 Ah - 200 Ah

SOLAR

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LUMINOUS

ONE STOP SOLAR SOLUTIONS

Luminous is a global powerhouse as well as a local favourite in the solar solutions segment. Our best-in-class products and top-of-the-line workmanship, assure you of a hasslefree journey.

Home Solutions

Solar Panel, NXG
Inverters & Batteries

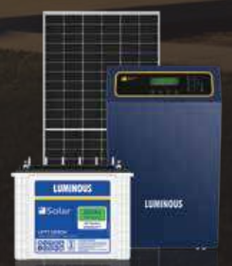
DC Solutions

Solar Panel, Charge
Controller & Batteries

Hybrid Inverter Solutions

Solar Panel, Hybrid
Inverter & Batteries

High Capacity Solutions



Solar Panel, NXT+
PCU & Batteries

Grid-Tie Solutions

Solar Panel & Solar NXi
Grid Tie Systems

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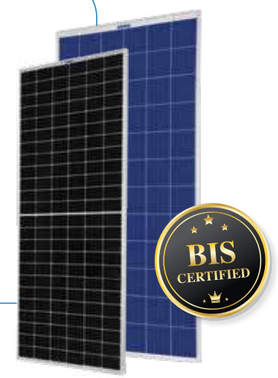
LUMINOUS

PV PANELS

Designed For High Performance

Luminous offers a range of both Mono PERC half cut and Polycrystalline PV modules. Ranging from 40W to 540W, our panels are BIS certified as per IS/IEC standards and are suitable for a wide range of applications.



25 Years
Performance Warranty

5 & 12 Years*
Product Warranty

Robust
Mechanical Design

Excellent Low-light Performance

Built with high quality glass and solar cell surface coating, 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.

PID Resistance Technology

Designed to eliminate power loss owing to stray currents

Advance EVA Encapsulation

Designed with multi layer EVA (ethyl vinyl acetate) encapsulation for better module protection.

Best in Class Efficiency

Innovative cell technology ensures optimum solar power generation providing high value for money.

IDEAL FOR

✓ Large scale utility systems ✓ Rooftop residential, commercial and industrial roof top installations
✓ Agricultural pumping applications

*Refer models for respective warranty

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Electrical Parameters @ STC#

Model	LUM 1240	LUM 1260	LUM 1280	LUM 12105	LUM 12170	LUM 24330	LUM 24540MPHC
Cell Type	Poly	Poly	Poly	Poly	Poly	Poly	Mono PERC Half Cut
No. of Cells	36	36	36	36	36	72	144
Peak Power PMax (Wp)	40	60	80	105	170	330	540
Rated Module Voltage (V)	12	12	12	12	12	24	24
Maximum Power Voltage Vmp (V)	18	18	18	18.05	18.86	38.03	41.92
Maximum Power Current Imp (A)	2.23	3.34	4.4	5.82	9.02	8.68	12.89
Open Circuit Volatge Voc (V)	22	22	22	22	23.01	45.53	49.40
Short Circuit Current Isc (A)	2.42	3.64	4.8	6.28	9.61	9.22	13.72
Module Efficiency (%)	13.72%	14.10%	15.21%	15.14%	16.47%	16.85%	20.89%
Maximum System Voltage (V)	600V	600V	600V	600V	600V	1000V	1500V
Maximum Series Fuse Rating	12A	12A	12A	12A	12A	20A	25A

#STC (1000W/m^2), AM1.5, cell temperature 25°C". Power Tolerance : 0/+5%. Power measurement accuracy:±3%

Mechanical Data

Module Dimensions (mm)	435x670	635x670	785x670	1035x670	1505x686	1976x996	2279 x 1134
LxWxT	x34	x34	x34	x34	x35	x35	x35
Module Weight (kgs)	3.30	5.20	6.50	8.20	11	22.50	29
IP Rating	IP 65	IP 65	IP 65	IP 65	IP 65	IP 67	
Cable & Connectors	No cable and connectors			1000mm length cables		1000mm length cables, MC4 Compatible/MC4 Connectors	
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	Composit 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

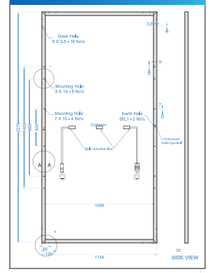
Warranty and Certificates

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	

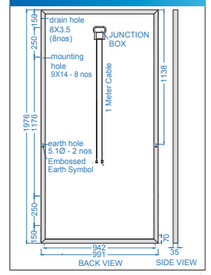
** Refer to Luminous Warranty document for Terms and conditions.
Technical specifications are subject to change without prior notice.

Solar Module Dimension

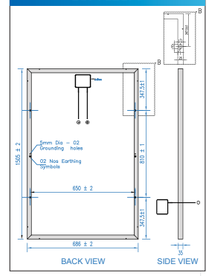
LUM 24540MPHC



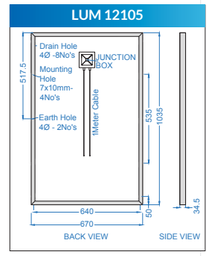
LUM 24330



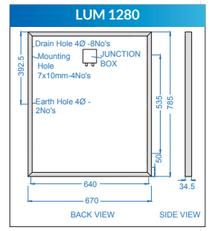
LUM 12170



LUM 12105



LUM 1280



SOLAR

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LUMINOUS

GRID TIE INVERTERS

Safe and Efficient

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 1kW to 110 kW.

10* Years Warranty

> 97% Efficiency

Connectivity Options

MPPT **Maximum Power Point Tracking**
MPPTs to extract up to 30% more power from the panels, minimizing impact of shading and increasing efficiency.

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

IP65 Protection
Designed to work in tough weather conditions. Flawless operation despite dust, rain or extreme temperature variations

BIS Certified
BIS certified as per IS/IEC standards

Remote Monitoring
Multiple modes of connectivity (GSM/Wi-fi) for remote monitoring enables proactive maintenance.

*5 years standard + 5 years extended warranty

AUG_22_V3

Solar Estimation Chart

Solution		No. of MPPT	Panel Connection Combination per MPPT (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	**PV Panel Watt**			
NXI 1kW	330Wp x 3 No.s	1	3 (S)	100
NXI 2kW	330Wp x 6 No.s	1	6 (S)	200
NXI 3kW	330Wp x 10 No.s	1	10 (S)	300
NXI 4kW	330Wp x 12 No.s	2	6 (S)	400
NXI 5kW	330Wp x 16 No.s	2	8 (S)	500
NXI 6kW	330Wp x 20 No.s	2	10 (S)	600
NXI 10kW	330Wp x 32 No.s	2	16 (S)	1000

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LUMINOUS

Single Phase

MODEL	Nxi 110	Nxi 120	Nxi 130	Nxi 140	Nxi 150
Input DC					
Max. DC Input Power (kW)	1.2	2.3	3.5	4.6	5.8
Max. DC Input Voltage (V)	600				
Start-up Voltage [V]	60	90		120	
MPPT Voltage range (V)	50-500	80 - 500		100 - 500	
Max input current per MPPT (A)	11A			11A+11A	
Number of MPPT	1			2	
Max Input Strings Number	1			2	
Output (AC)					
Rated output power (kW)	1	2	3	4	5
Max. output power [kW]	1.1	2.2	3.3	4.4	5
Max. output Current [A]	5.2	10.5	15.7	21	25
Grid voltage range (V)	160-285				
Grid Frequency range (Hz)	50/60 Hz				
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%		97.5%	> 98.1%	
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				
Interface					
DC Connection	MC4 Connectors				
Display	LCD 2X 20 Z				
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 Convention				
Relative Humidity	0 - 100 %				
Max. Operational Altitude	4000m				
Noise [dBA]	<20dBA		<30dba	<30 dba	
Designed Lifetime	> 20 years				
Ingress Protection	IP65				
Dimensions (W*H*D) [mm]	310W*373H*160D(mm)			310W *543H *160D	
Net weight (Kg)	7.4		7.7	11.5	
Standards					
Safety/EMC	IEC62109-1/-2, NB/T 32004, EN61000-6-1, EN61000-6-3				

* Check availablity of GSM or wifi 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
Input DC						
Max. DC Input Power (kW)	6.0	7.2	9.6	12	14.5	18
Max. DC Input Voltage (V)	1000					
Start-up Voltage [V]	180					
MPPT Voltage range (V)	160 - 1000					
Max input current per MPPT (A)	11A + 11A				22A+22A	
Number of MPPT	2					
Max Input Strings Number	2				4	
Output (AC)						
Rated output power (kW)	5	6	8	10	12	15
Max. output power [kW]	5.5	6.6	8.8	11	13.2	16.5
Max. output Current [A]	8.4	10	13.4	16.7	20.1	25.1
Grid voltage range (V)	313 - 470					
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	4 pins RS485 connector				4 pins RS485 connector	
General Data						
Topology	Transformerless					
Consumption @ night	< 1 W					
Operating Temperature Range	-25°C to 60°C					
Cooling Method	Natural Convention					Intelligent redundant fan cooling
Relative Humidity	0 to 100%					
Max. Operational Altitude	4000m					
Noise [dBA]	<30 dBA					
Designed Lifetime	> 20 years					
Ingress Protection	IP65					
Dimensions (W*H*D) [mm]	310W*563H*129D				310W*608H*219D	
Net weight (Kg)	14.1				19.9	
Standards						
Safety/EMC	IEC 62109-1, 62109-2: AS3100					

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

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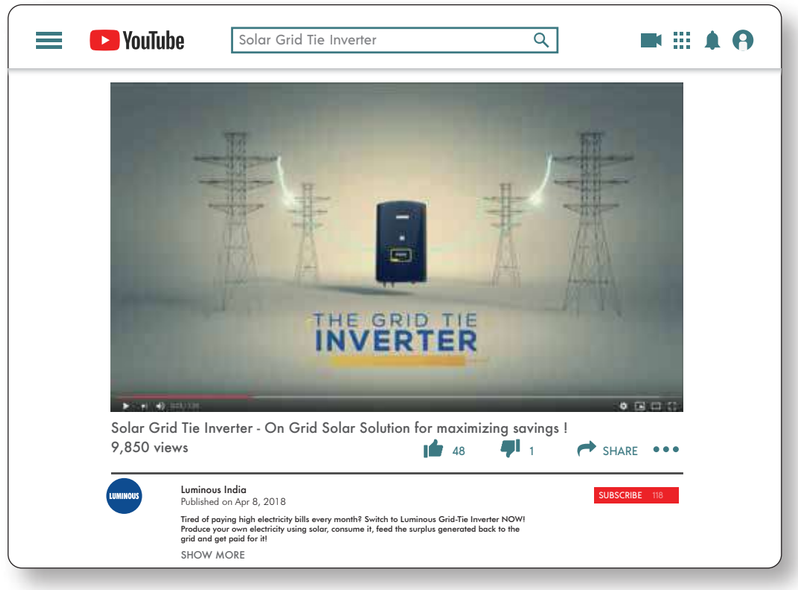
Three Phase

MODEL	Nxi 320	Nxi 325	Nxi 330	Nxi 350	Nxi 3600	Nxi 380	Nxi3100	Nxi3110
Input DC								
Max. DC Input Power (kW)	24	33	39	55	72	88	110	121
Max. DC Input Voltage (V)	1000	1100			1100		1100	
Start-up Voltage [V]	180			195			195	
MPPT Voltage range (V)	160 - 1000	200 - 1000				180 - 1000	180 - 1000	
Max input current per MPPT (A)	22A+22A	26A + 26A + 26A		28.5A + 28.5A + 28.5A + 28.5A	28.5A + 28.5A +28.5A + 28.5A	9*26A	10*26A	
Number of MPPT	2	3		4	4	9	10	
Max Input Strings Number	4	6		12	12	18	20	
Output (AC)								
Rated output power (kW)	20	25	30	50	60	80	100	110
Max. output power [kW]	22	27.5	33	55	66	88	110	121
Max. output Current [A]	33.3	27.5	33	83.3	100	88	167.1	183.8
Grid voltage range (V)	313 - 470	220-400		304-460		230-480	220-400	
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]	<2%	<3%			<2%	<3%		
Feed-in phase/connection phase	Three Phase							
Efficiency								
Max. Efficiency	98.60%	98.8%				99%		
MPPT Efficiency	99.5%	>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	4 pins RS485 connector	4 pins RS485, Ethernet		4 pins RS485 connector, 2 RJ45 connector, 2 Group of terminal block		4 pins RS485, Ethernet		
General Data								
Topology	Transformerless							
Consumption @ night	< 1 W					< 2 W		
Operating Temperature Range	-25°C to 60°C							
Cooling Method	Natural Convention			Intelligent redundant fan cooling		fan cooling		
Relative Humidity	0 to 100%							
Max. Operational Altitude	4000m							
Noise [dBA]	<30 dBA			<60 dBA		<55 dBA	<65 dBA	
Designed Lifetime	> 20 years							
Ingress Protection	IP65					IP66		
Dimensions (W*H*D) [mm]	310W*608H*219D	647W*629H*252D		630W*700H*357D		1050W*567H*286.5D	1065W*567H*344.5D	
Net weight (Kg)	19.9	45		63	69	85	84	
Standards								
Safety/EMC	IEC 62109-1, 62109-2: AS3100	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4		IEC62109-1/-2, AS3100, EN61000-6-1, EN61000-6-3		IEC62109-1/-2, EN61000-6-1 EN61000-6-3	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, IEC 61683, IEC 60068, IEC 61727, IEC 62116	

For more information



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SOLAR

LUMINOUS

POWER CONDITIONING UNIT

High Capacity & Control

The NXT+ range of PCUs is the ideal solution for Off-grid applications. Designed to offer control, the PCU intelligently optimizes battery charging and power to load among Solar, Battery and Grid power. Available from 3.75kVA to 12.5kVA. Warranty: 2 Years

High Efficiency MPPT

User Controlled Settings

Long Power backup

Priority Settings
Priority settings allow the user to choose among reduced grid dependency & energy savings, enhanced backup and autonomy from grid.

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

Maximum Power Point Tracking
MPPTs extract 30% more power as compared to UPS with PWM charge controllers.

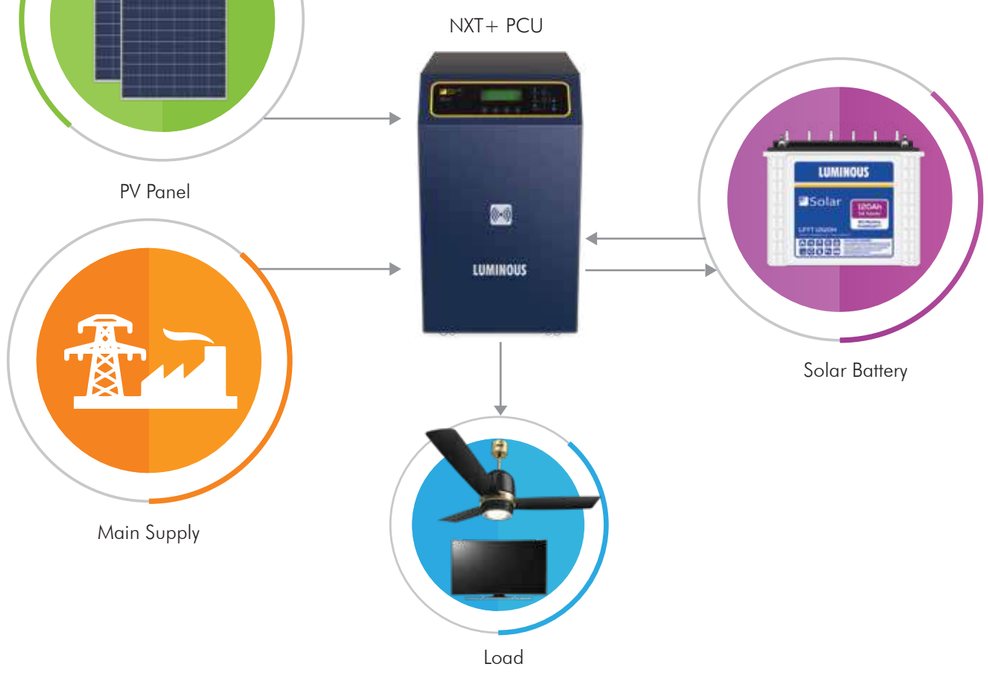
Guaranteed Safety
Comprehensive protection features include short-circuit, reverse polarity, battery over-charge etc.

BIS Certified
BIS certified as per IS/IEC standards

AUG_22_V3

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
NXT+ 3.75 kVA	200 Ah x 4	330Wp x 9 No.s	3 (S) 3 (P)	300
NXT+ 7.5 kVA	200 Ah x 8	330Wp x 20 No.s	4 (S) 5 (P)	600
NXT+ 9.5 kVA	200 Ah x 10	330Wp x 24 No.s	6 (S) 4 (P)	750
NXT+ 12.5 kVA	200 Ah x 10	330Wp x 30 No.s	6 (S) 5 (P)	1000



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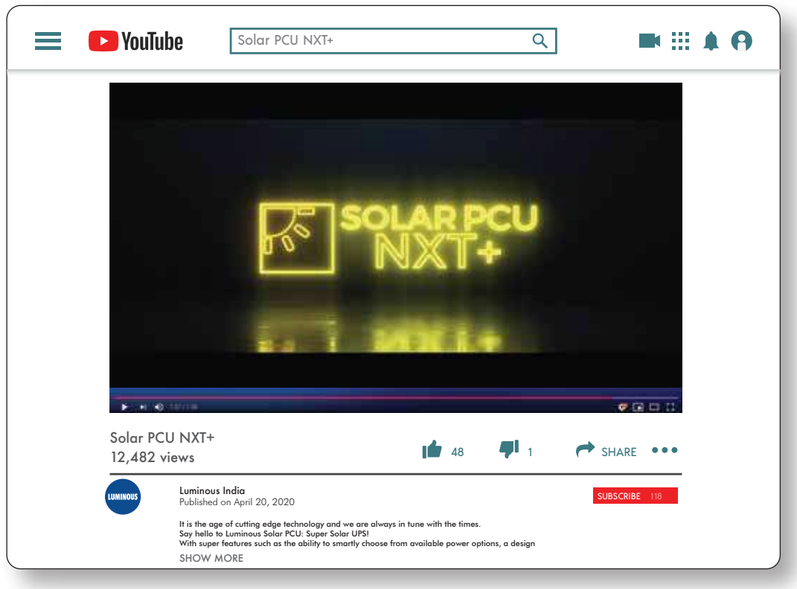
Technical Specifications

Model Name	NXT+ 3.75 kVA	NXT+ 7.5 kVA	NXT+ 9.5 kVA	NXT+ 12.5 kVA
Capacity (kVA)	3.75kVA	7.5kVA	9.5kVA	12.5kVA
Nominal Battery Voltage (Vdc)	48V	96V	120V	
Output Waveform	Sine Wave			
SOLAR PHOTOVOLTAIC INPUT				
Type of Charger	MPPT			
Maximum PV power (kW)	3	6	7.5	10
Input Voltage range (Voc)	80 - 165	160-240	180-300	
Input Voltage range (Vmp)	65 - 130	120-210	150-240	
GRID INPUT				
Input Supply Phases	Single Phase			
Nominal Voltage & Voltage range	230V AC (185V - 265V)			
Nominal Frequency & Range	50 Hz (±3 Hz)			
BATTERY				
Battery recharge current range from Grid Side (A)	0-30	0-30	0-35	0-45
Battery recharge current range from Array Side (A)	0-60	0-60	0-65	0-80
Charging Stages	Float, Bulk, Boost		Boost, Absorption, Float	
UPS				
Switching Element	MOSFET	IGBT		
Control	32 Bit DSP controlled			
Nominal Output V_{AC}	230V ± 1% , Single Phase			
Output waveform	Pure Sine Wave			
Nominal Frequency	50 Hz (±0.5 Hz)			
Power Factor	0.8 lag to 0.8 lead			
Nominal Output Current (A)	13	26	33	44
Overload at nominal output voltage	110% for 10 Minutes, 200% for 5 Secs			
SYSTEM DATA				
Noise @ 1 meter (dBA ± 2dBA)	<58dBA		<62dBA	
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, Array Path and PCU O/P			
Display Parameters	Voltage/Current: Array, Battery, Grid, Output; Day kWh, Cumulative kWh, Date, Time			
Indications	Battery Charging/ Discharging, Grid ON, Load ON, UPS ON, Array ON, Fault LED Indicator (For Overload, Low Battery, Over Temperature),			
Setting	Battery type, Battery voltage (Boost & Float), Priority (SGB/SBG), Charging Current from Grid			
ENVIRONMENT				
IP Protection Level	IP-21			
Operating Temperature (˚C)	0-50 °C without any degradation			
Max. Relative humidity @ 25˚C	Up to 95% (non-condensing)			
Max. Altitude above sea level without de-rating (m)	1000 m			
STANDARD COMPLIANCE				
Certifications	BIS certified as per IS/IEC standards			
GENERAL				
Dimension (W*D*H) [mm]	300x504x515	350x635x589	400x575x783	
Net Weight (Kg)	50	76.3	125	150

Technical specifications are subject to change without prior notice.

For more information



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SOLAR

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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 in 2kVA, 3kVA.

2 Years Warranty

Smart Solar optimization

User Controller Settings

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

Guaranteed Safety
Comprehensive protection features include short circuit, reverse polarity, surge protection, etc.

Maximum Power Point Tracking
MPPTs to extract up to 30% more power from the panels, minimizing impact of shading and increasing efficiency.

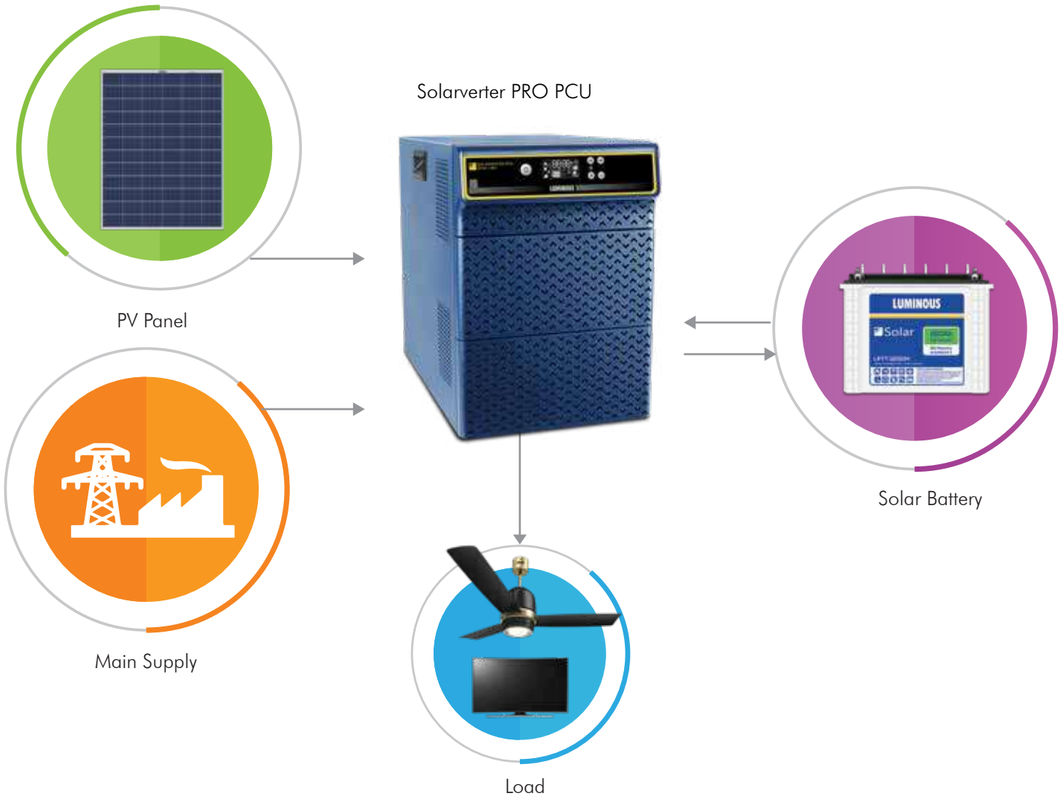
BIS Certified
BIS certified as per IS/IEC standards

User friendly LCD Display
Makes it convenient for user to easily monitor various performance parameters.

AUG_22_V3

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	330Wp x 6 Nos.	2 (S) 3 (P)	200
SOLARVERTER PRO 3KVA	150Ah x 3	330Wp x 9 Nos.	3 (S) 3 (P)	300



SOLAR

AUG_22_V3

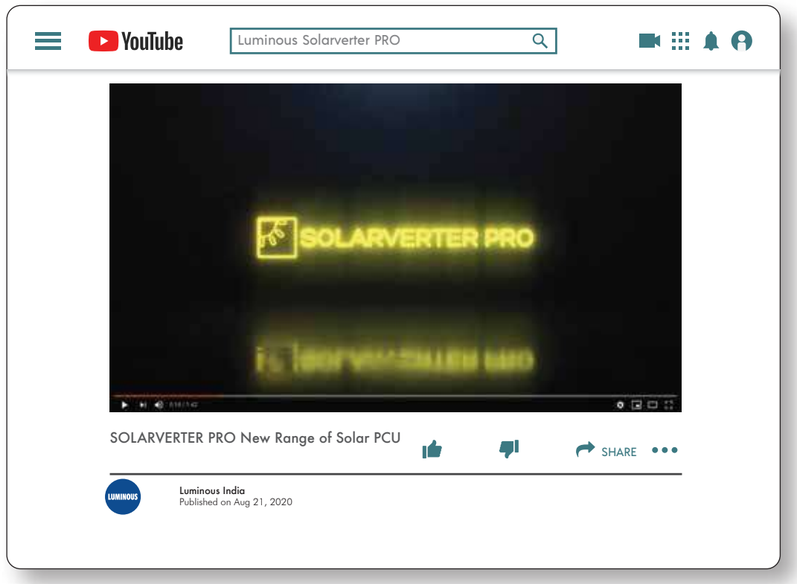
LUMINOUS

Technical Specifications

Model Name	SOLARVERTER PRO 2KVA	SOLARVERTER PRO 3KVA
Capacity (kVA)	2kVA	3kVA
Nominal Battery Voltage (Vdc)	24V	36V
Output Waveform	Sine Wave	
SOLAR PHOTOVOLTAIC INPUT		
Type of Charger	MPPT	
Maximum PV power (kW)	2500W	3500W
Solar Input Voltage (Voc)	57V-100V	75V-150V
Solar Input Voltage range (Vmp)	45V-85V	60V-120V
Max. PV Input Current (Imp)	38A	38A
Nominal Battery Charging Current (At STC)	91A±2A	
Max. Battery Charging Current (Regulation)	≤100A±10A	
No. of MPPT Channels	1	
GRID INPUT		
Input Supply Phases	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode (Unregulated UPS Mode)	110-280Vac	
Input Protection	32A MCB	
BATTERY		
No. of Batteries	2	3
Charging Stages	Boost, Absorption, Float	
Battery Charging Current	0A, 14A, 17A, 20A	
Type of Battery	Tubular/SMF/Flat	
UPS		
Switching Element	MOSFET	
Control	16 Bit DSP controlled	
Nominal Output Voltage (V)	230V ± 2%	
Output Supply Phase	1 Phase 3 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	7.5A	11A
Output Voltage Distortion(THD)	<= 3%	
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	IP-21	
Operating Temperature	0-45 °C	
Storage Temperature	0-45°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
GENERAL		
Dimension (L*W*H) [mm]	300x417x452	
Net Weight (Kg)	25kg	32.5kg

Technical specifications are subject to change without prior notice.

For more information



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SOLAR

LUMINOUS

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

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

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

3 User Settable Saving Modes
Solar Mode
Solar+Grid Mode
Grid+Solar Mode

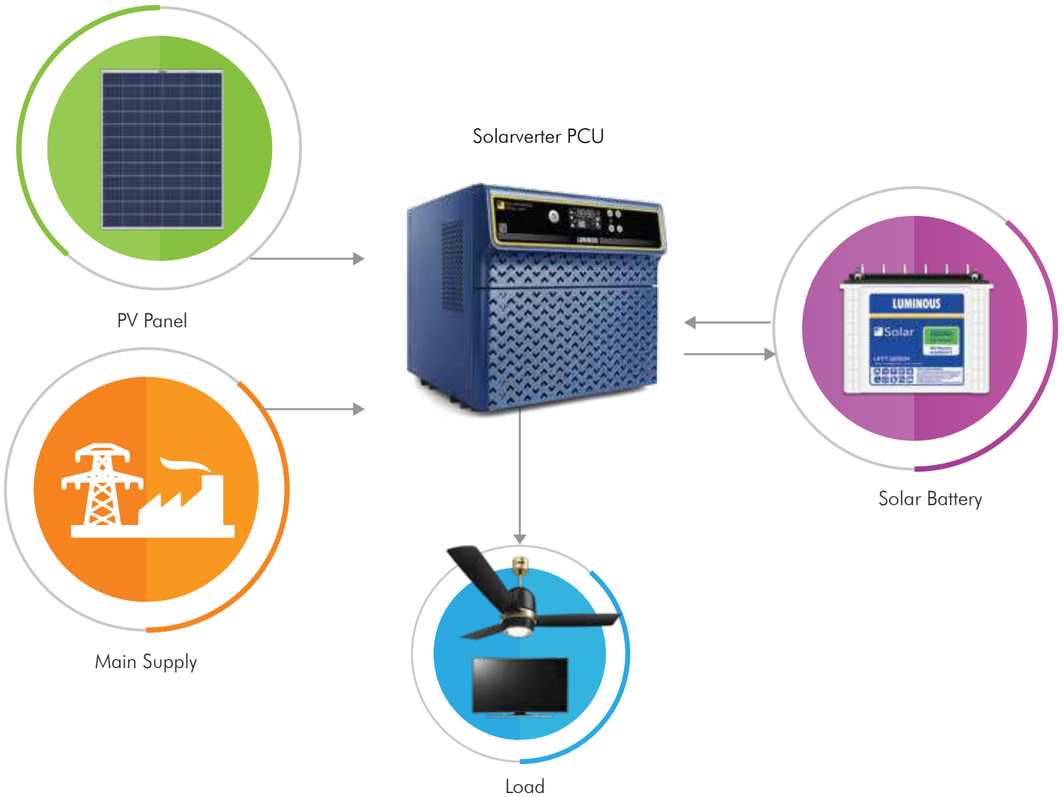
BIS Certified
BIS certified as per IS/IEC standards

User friendly LCD Display
Makes it convenient for user to easily monitor various performance parameters.

AUG_22_V3

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	330Wp x 6 Nos.	6 (P)	200
SOLARVERTER 3KVA	150Ah x 4	330Wp x 8 Nos.	2 (S) 4 (P)	270



SOLAR

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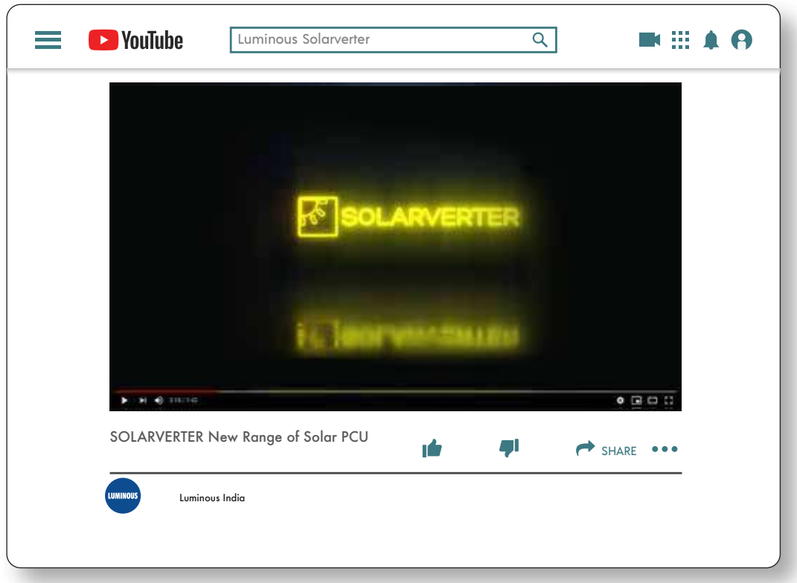
LUMINOUS

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
Maximum I/P Current (Array)	60	50
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	6A	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-21	
Operating Temperature	0-55 °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.

For more information



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SOLAR

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LUMINOUS

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

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

Remote Monitoring
Multiple modes of connectivity (GSM/WIFI) for remote monitoring enables keeping track of solar generation and proactive maintenance

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

AUG_22_V3

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	200Ah x 4	330Wp x 9 Nos.	3 (S) 3 (P)	300
HYBRID TX 5KVA	200Ah x 4	330Wp x 12 Nos.	4 (S) 3 (P)	400

SOLAR

AUG_22_V3

LUMINOUS

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	

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)	
Settings	"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	
Datalogger & Communication	4 pins RS485 connector	
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	

SOLAR

AUG_22_V3

LUMINOUS

NXG SOLAR 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

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

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

3 User Settable Saving Modes
Solar Mode
Solar+Grid Mode
Grid+Solar Mode

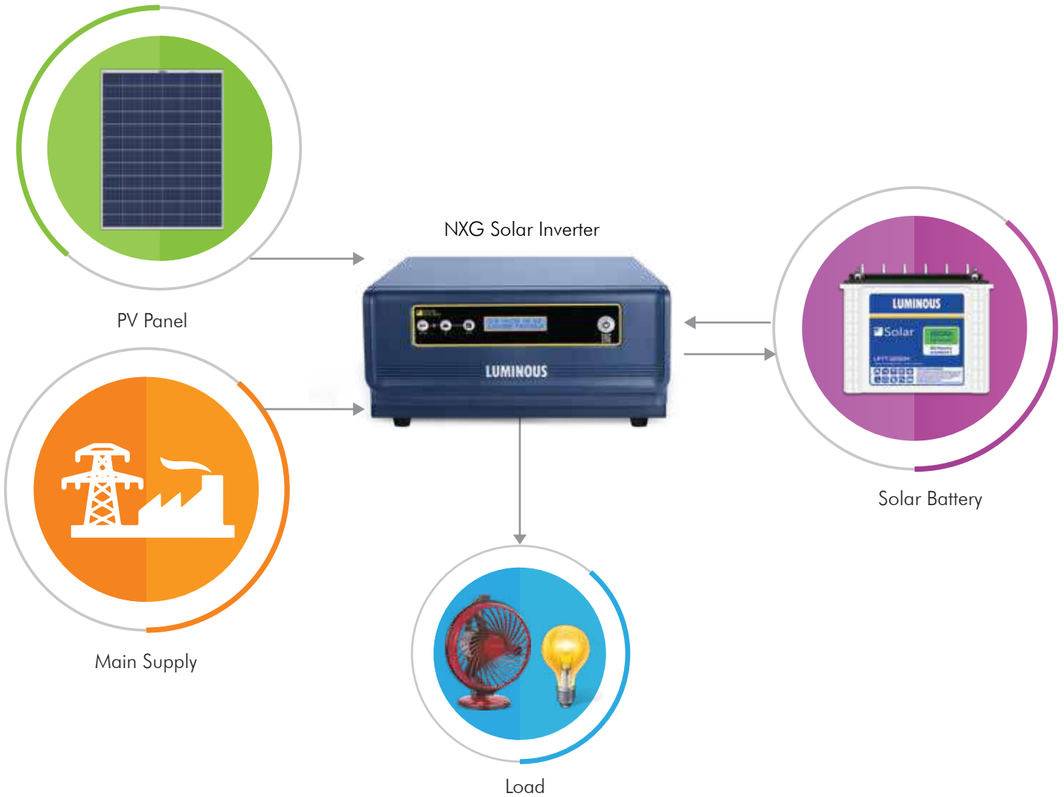
Intelligent Load Sharing
Maximum utilization of solar power and battery

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

AUG_22_V3

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Inverter	Solar Battery	PV Panel Watt		
NXG 850	150Ah x 1	170Wp x 3 Nos.	3 (P)	60
NXG 1150	150 Ah x 1	170Wp x 5 Nos.	5 (P)	100
NXG 1450	150Ah x 1	170Wp x 6 Nos.	6 (P)	120
NXG 1850	150 Ah x 2	540Wp x 2 Nos.	2 (P)	120



SOLAR

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LUMINOUS

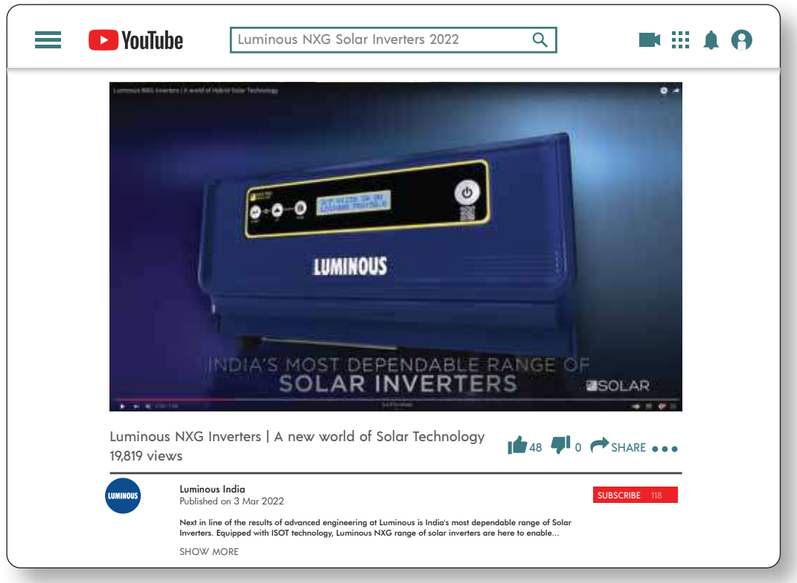
Technical Specifications

Model Name	NXG 850	NXG 1150	NXG 1450	NXG 1850
Nominal Battery Voltage (Vdc)	12V	12V	12V	24V
Capacity (VA)	500VA	850VA	1100VA	1500VA
Output Waveform	Sine Wave			
SOLAR PHOTOVOLTAIC INPUT				
Charge Controller Type	PWM			
Charge Controller Rating	30A	50A	60A	50A
Maximum PV Power	500Wp	850Wp	1100Wp	1500Wp
Input Voltage range (Voc)	18V-25V	18V-25V	17V-25V	36V-60V
Input Voltage range (Vmp)	14V-18V	14V-18V	14V-18V	28V-38V
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
Gross weight (Kg)	9.7 kg	13 kg	17.8 kg	18.5 kg
Dimensions LxWxH (mm)	320x302x130 mm		320x275x150 mm	

Technical specifications are subject to change without prior notice.

AUG_22_V3

For more information



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LUMINOUS

NXG PRO SOLAR INVERTERS

With proven MPPT technology

NXG PRO is an intelligent solar inverter which comes with in-built MPPT technology helping in extracting 30% more power from solar panels.

2 Years Warranty

Compatible with both 12V & 24V Solar Panels

Max Capacity Utilization

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

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

3 User Settable Saving Modes
Solar Mode
Solar+Grid Mode
Grid+Solar Mode

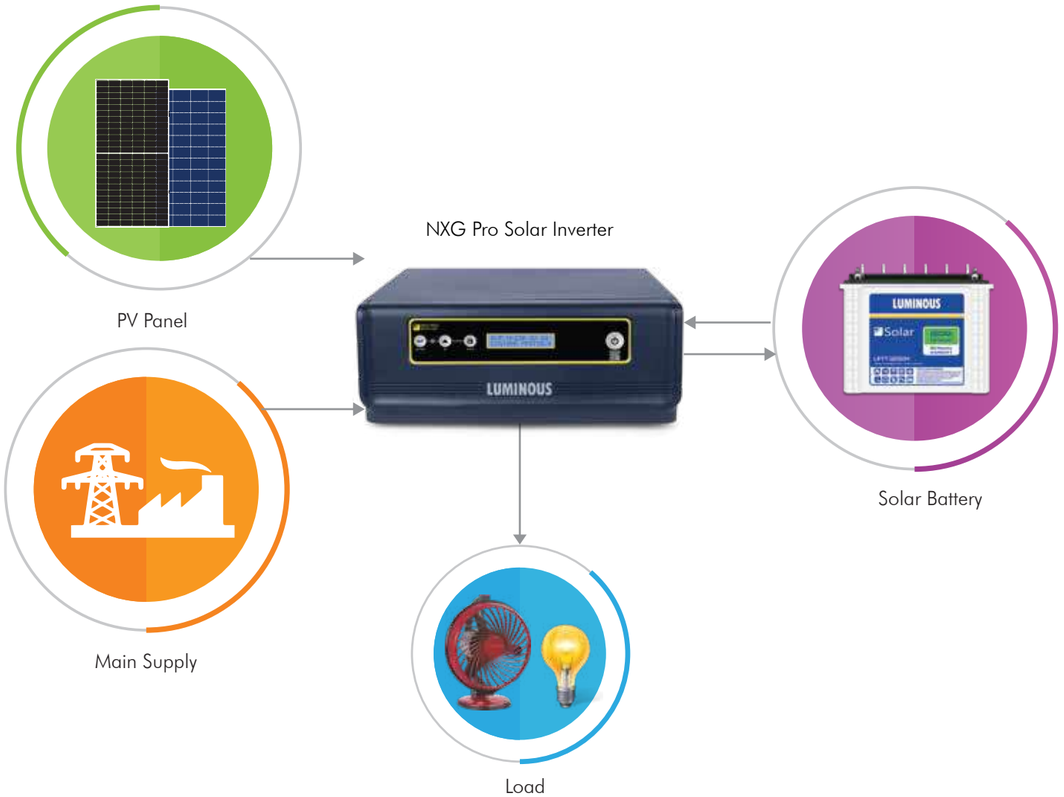
Compatible With Both 12V & 24V Solar Panels
Gives you the flexibility to connect either 12V or 24V solar panels as per your need

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

AUG_22_V3

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	170Wp x 6 Nos.	2 (S) 3(P)	120
NXG PRO 1KVA/24V	150 Ah x 2	540Wp x 2 Nos.	2 (P)	120



SOLAR

AUG_22_V3

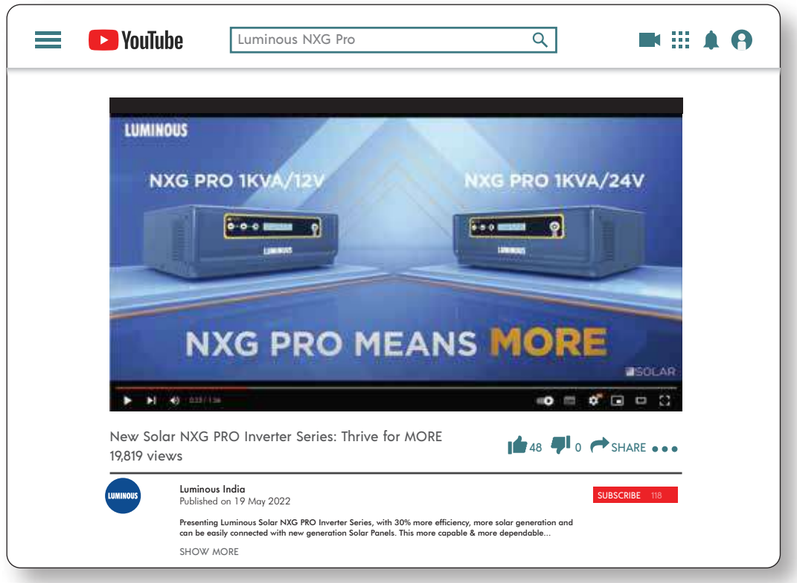
LUMINOUS

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.

For more information



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LUMINOUS

RETROFIT

Smart upgrade to Solar

Shine Retrofit is a smart upgrade that converts existing inverter into solar inverter without any change in existing wiring. Ideal for small to large systems <10KVA

Solar Optimization

User Friendly Display

Solar Optimization Technique

Solar optimization technique extracts maximum power by intelligently prioritizing solar over grid.

Four Stage Charging

4-stage smart charging ensures fast, safe & efficient charging and longer battery life.

LCD Display

User friendly displays communicates information like battery Charging Status, Charging Source, Total unit savings etc.

MCB Protection

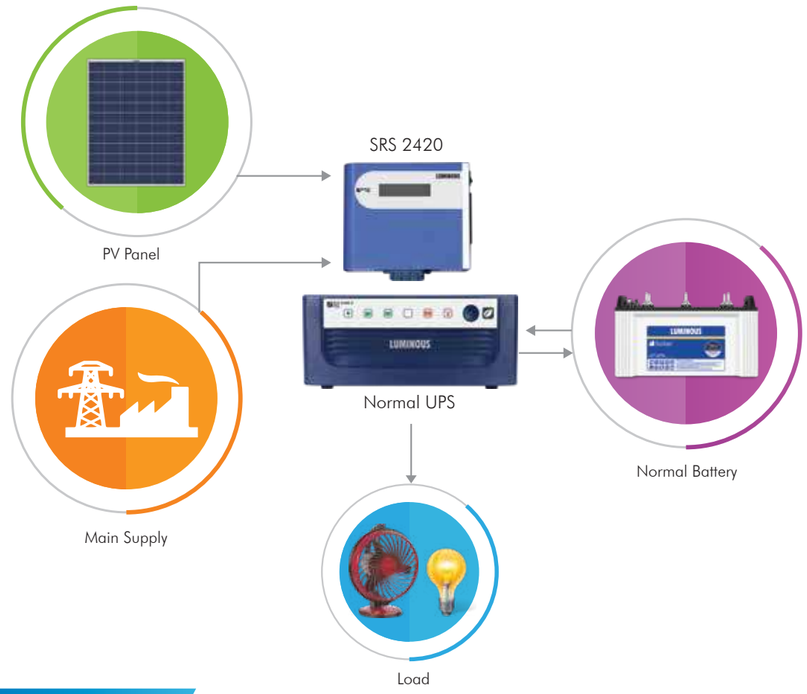
World class MCB ensures your UPS and connected loads stay protected from short circuits.

Warranty

1 Year warranty

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	**Solar Retrofit**	**PV Panel Watt**		
12VUPS	SHINE 1220	170Wp x 2 No.s	2 (P)	40
24V UPS	SHINE 2420	330Wp x 2 No.s	2 (P)	80
24V UPS	SHINE 3650	330Wp x 5 No.s	5 (P)	200
36V UPS	SHINE 3650	170Wp x 12 No.s	3 (S) 4 (P)	300
48V UPS	SHINE 4850	330Wp x 8 No.s	2 (S) 4 (P)	300
96V UPS	SHINE 9650	330Wp x 16 No.s	4 (S) 4 (P)	600
120V UPS	SHINE 12050	330Wp x 20 No.s	5 (S) 4 (P)	700



Technical Specifications

Model Name	Shine 1220	Shine 2420	Shine 3650	Shine 4850	Shine 9650	Shine 12050
Charge Controller Type	PWM					
Charge Controller Rating	20A @12V	20A @12V/24V	50A@24V/36V	50A @48V	50A @96V	50A @120V
Maximum PV Power	100Wp-400Wp @ 12V	100Wp-400Wp @ 12V 200Wp-800Wp @24V	250Wp-1700Wp @ 24V 375Wp-2500Wp @36V	Upto 2800 Wp	Upto 5600 Wp	Upto 7000 Wp
Input Voltage range (Voc)	17-25	17-25 @ 12V, 36-50 @ 24V	38-55 @ 24V, 57-75 @ 36V	70-92	140-185	170-230
Input Voltage range (Vmp)	15-21	15-21 @ 12V, 31-39 @ 24V	34-39 @ 24V, 51-57 @ 36V	60-77	119-153	145-191
Operating temperature range	0°C to + 45°C	0°C to + 45°C	0°C to 50°C	0°C to + 45°C	0°C to + 45°C	0°C to + 45°C
Power connection	30A Terminal Block	30A Terminal Block	65A Terminal Block	60A Terminal Block		
Dimension (mm)	178x71x159		280x129x205	375x315x135		
Wire size	6 Sq. mm	6 Sq. mm	10 Sq. mm	16 Sq. mm		
Weight (kg)	1.2	1.2	3	4.5	5.7	5.7

Technical specifications are subject to change without prior notice.

SOLAR

LUMINOUS

CHARGE CONTROLLER

Easy upgrade to Solar

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

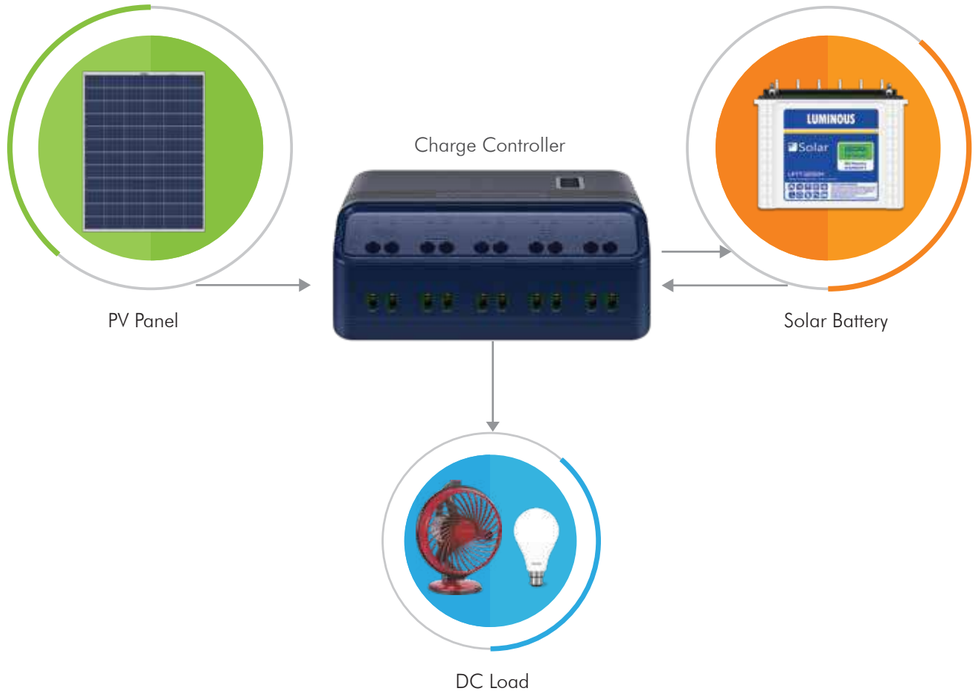
Protection Against Over-Charge and Reverse Current
Charges batteries from solar panels without permitting overcharge and also prevent reverse current flow at night.

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

Warranty
1 Year Warranty

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	105Wp x 1 No.s	1 (S)	10
SCC 1210	@12V	170Wp x 1 No.s	1 (S)	20
SCC 1210	@24V	330Wp x 1 No.s	1 (S)	40
SCC 1220	@12V	170Wp x 2 No.s	2 (P)	40
SCC 1220	@24V	330Wp x 2 No.s	2 (P)	80



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)â 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	0ºC to 50ºC		
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

LUMINOUS

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 5 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

Technical specifications are subject to change without prior notice.

*STC - Standard Test Conditions

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UNMATCHED CUSTOMER SERVICE

Prompt and continuous support to keep your solar power generation system running. Our service in 300 cities trained professional 24x7 helpline make us the most powerful brand in India.

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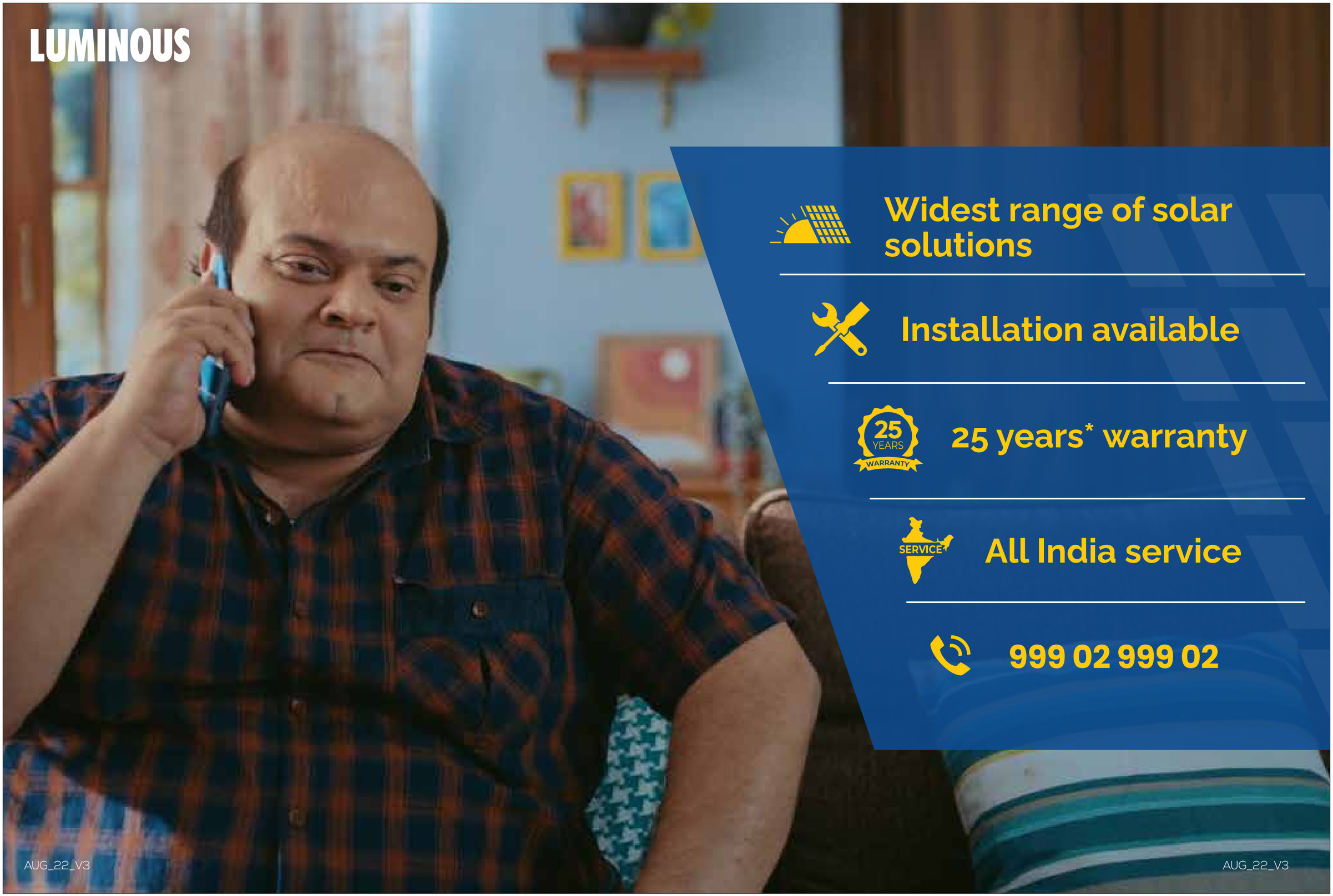
LUMINOUS
Widest range of solar solutions
Installation available
25 YEARS WARRANTY
25 years* warranty
SERVICE
All India service
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