35+ Years of EXCELLENCE

LUMINOUS

Luminous Power Technologies Pvt. Ltd.

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/c/LuminousGlobal www.luminous-global.com

LUMINOUS



COMPLETE SOLAR SOLUTION

INVERTER | BATTERY | PANEL

International Business | Export Portfolio



OVER 35 YEARS OF MAKING HOMES HAPPIER

With a legacy of over 35 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

35+ Years of EXCELLENCE

LUMINOUS

WIDE RANGE OF SOLAR PRODUCTS

Off Grid



NXG+ Inverter

500VA - 1500VA



NXT+ PCU

1.25 kVA - 12.5 kVA



Solarverter

2KVA/24V | 3KVA/48V



Solarverter PRO PCU

2kVA, 3kVA



Rayverter Off Grid

3KVA/24V | 5KVA/48V

On Grid



NXi Grid Tie Inverter

1kW - 80kW

Hybrid



Rayverter Hybrid

3KVA/24V | 5KVA/48V



Low Frequency Solar

3.75kVA

DC Solution



Shine Retrofit

12V - 120V



Solar Charge Controller

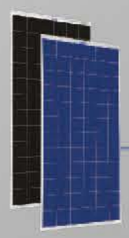
12V-6Amp,
12V/24V-10Amp,
20Amp & 25Amp

Batteries & Panels



Solar C10 Rated Batteries

150 Ah - 200 Ah



Mono PERC and Polycrystalline Panels

40W - 395W

SOLAR

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OFF GRID



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NXG INVERTER

Off Grid

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.



UPS Mode
Sensitive Appliances

Maximized Solar
Usage

User Defined
Settings

ISOT Technology
Intelligent Solar Optimization Technique (ISOT) maximizes solar energy usage in both backup and charging mode of operation.

Fast Charging
I-charge technology allows batteries to be charged quickly. This is a user-defined setting.

ECO and UPS Mode
Choice between Eco mode that conserves battery (Ideal for low voltage areas) and UPS mode (Ideal for computer loads)

Safety and Protection
In-built protection against deep discharge, overcharge, excessive current and short-circuit.

Pure Sine Wave Output
Ensures noiseless operation and safety of connected appliances.

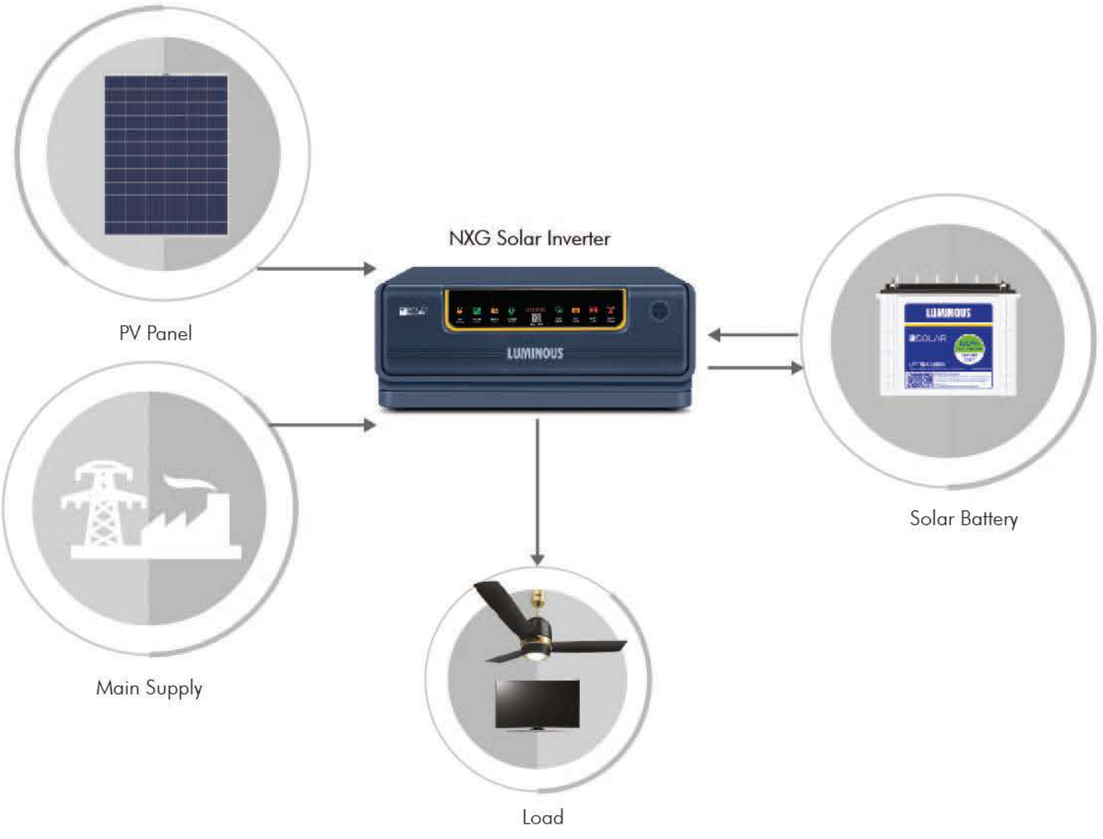
Scan QR Code for Product Video

youtube/c/LuminousGlobal

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
NXG+ 850VA	150 Ah x 1	170 Wp x 5 No.s	5 (P)	80
NXG 1100VA	200 Ah x 1	170 Wp x 6 No.s	6 (P)	80
NXG 1500VA	200 Ah x 2	375 Wp x 4 No.s	4 (P)	100

Schematic Representation



Off Grid

SOLAR

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Technical Specifications

Model Name	NXG+ 850VA	NXG 1100VA	NXG 1500VA
Nominal Battery Voltage (Vdc)	12V	12V	24V
Capacity (VA)	850VA	1100VA	1500VA
Output Waveform	Sine Wave		
SOLAR PHOTOVOLTAIC INPUT			
Charge Controller Type	PWM		
Charge Controller Rating	40Amp/12V	40Amp/12V	40Amp/24V
Maximum PV Power	12V upto 800 Wp	12V upto 1000 Wp	24V upto 1000 Wp
Input Voltage range (Voc)	19-25	19-25	38-50
Input Voltage range (Vmp)	17-19	17-19	34-39
GRID INPUT			
Operating Voltage Range	90V-290V		
GRID OUTPUT			
No load output	230V+/-10V		
Output frequency battery mode	50Hz±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	15A±2A		
Grid + Solar Mode	20A±2A		
BATTERY			
No. of Batteries	1		2
Battery Charging Current	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 + 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	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)	11.8 kg	16.5 kg	17.1 kg
Gross weight (Kg)	13 Kg	17.8 Kg	18.5 kg
Dimensions LxWxH (mm)	455x405x210 mm	465x415x215 mm	



LUMINOUS

NXT+ PCU

Off Grid

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 in 3.75kVA and 12.5kVA.



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.

IEC Certified
Product certified as per IEC standards

Scan QR Code for Product Video

youtube/c/LuminousGlobal

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+ 12.5 kVA	200 Ah x 10	330Wp x 30 No.s	6 (S) 5 (P)	1000

Schematic Representation



Off Grid

SOLAR

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Technical Specifications

System Rating	3.75 KVA	12.5 KVA
Photovoltaic Input		
Input Voltage range (Vmp)	60-130	160-230
Maximum PV power (kW)	3.3	11
MPPT Based Charge		
Type of Charger	MPPT	
Input Voltage range (Voc)	80-165	180-300
Charging Stages	Float, Bulk, Boost	
GRID INPUT		
Input Supply Phases	Single Phase	
Nominal Voltage & Voltage range	230V AC (185V - 265V)	
Nominal Frequency & Range	50 Hz (±3 Hz)	
BATTERY		
Nominal Battery Bank Voltage	48V	120V
Battery recharge current range from Grid Side (A)	12-30	0-30
Battery recharge current range from Array Side (A)	0-60	0-80
UPS		
Switching Element	MOSFET	IGBT
Control	32 Bit DSP controlled	
Nominal Output Vac	230V ± 1% , Single Phase	
Output waveform	Pure Sine Wave	
Nominal Frequency	50 Hz	
Power Factor	0.8 lag to 0.8 lead	
Nominal Output Current (A)	13	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	IEC 61683, IEC 60068-2 (1,2 14,30)	
GENERAL		
Dimension (W*D*H) [mm]	300x504x515	On Request
Net Weight (Kg)	50	On Request



LUMINOUS

SOLARVERTER

Off Grid

Soalrverter is a PWM technology Solar Inverter that has innovative hybrid charging from both Solar & mains with an advanced feature of charging solar & mains with priority to solar. It ensure lesser charging time and minimal commercial mains Utilization.



ECO/UPS Mode

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.

ECO and UPS Mode
Choice between Eco mode that conserves battery (Ideal for low voltage areas) and UPS mode (Ideal for computer loads)

IEC Certified
Product certified as per IEC standards

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

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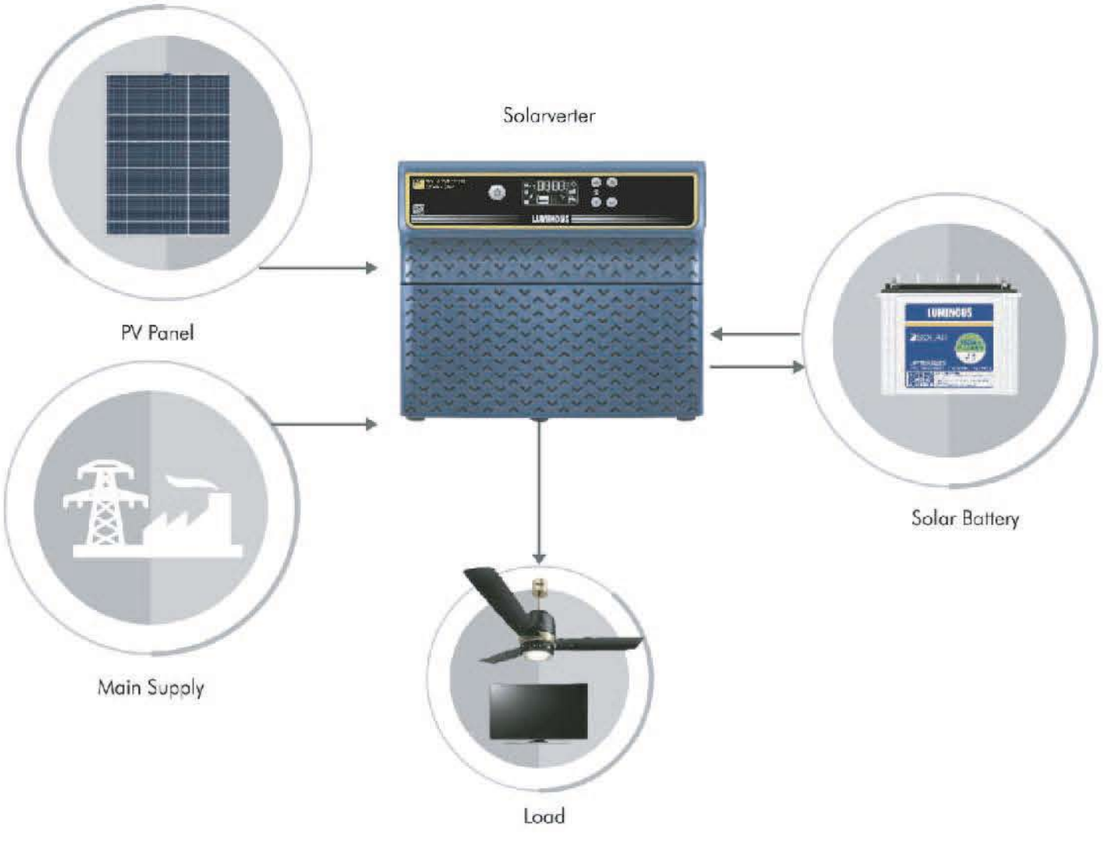
Solar Estimation Chart

Solarverter 2KVA | 24V			Solarverter 3KVA | 36V		
Panel Wattages	No. of Series Connections	No. of Parallel Connections	Panel Wattages	No. of Series Connections	No. of Parallel Connections
165Wp	2	6	165Wp	4	4
195Wp	2	5	195Wp	4	4
325Wp	1	6	325Wp	2	4
375Wp	1	5	375Wp	2	4



Off Grid

SOLAR

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Technical Specifications

Model Name	SOLARVERTER 2KVA	SOLARVERTER 3KVA
INPUT		
Rated Voltage	230V AC	
Undervoltage	140±5V	
Undervoltage Restoration	150±5V	
Overvoltage	290±5V	
Overvoltage Restoration	280±5V	
INPUT		
Rated Voltage (UPS Mode)	230V AC	
Voltage (Mains Mode)	SAME AS INPUT	
Frequency (UPS Mode)	50±1 Hz	
Frequency (Mains Mode)	SAME AS INPUT (47-53 Hz)	
Overload	> 100%	
Transfer Time (typical a.s.)	< 20ms.	
BATTERY		
Capacity*	65Ah-220Ah TUBULAR / FLAT / SMF	
No. of Batteries	2	4
Typical Recharge Time	8-10 hours approx.	
Battery Boost Voltage	28.8V-29.4±0.5V	58.2V-59.2±0.5V
Protection	LOW BATTERY	
PHYSICAL		
Net weight (Kg.)	25.0 kg approx	31.5kg approx
Gross weight (Kg.)	27.0 kg approx	34.5kg approx
Dimension (L*W*H) [mm]	300x326x284	300x352x429
SOLAR		
Solar Panel	PV Panel of 2400Wp, Voc 60V Max	PV Panel of 3600Wp, Voc 120V Max
Front LCD Displays		
Solar Overload	Displays "SoLd"	
Solar Over Temperature	Displays "SotP"	
Solar Priority	Sr:gr	
Load Percentage	Displays "L085%"	
Time to Charge & Discharge	Display time to charge or discharge in HH:MM	
Overload	Displays "Old"	
Short Circuit	Displays "sct"	
No Load	Displays "nL:dL"	
Overtemerature	Displays "otp"	
Battery Low	Displays "Lbt" when batt. completely discharged	
Battery High Cut	Displays "btHI" when battery voltage > 31V	Displays "btHI" when battery voltage > 62V
Temp. Sensor Failed	Displays "tSFL" When internal failure	
Battery Level Symbol	Displays battery level available	
Charging Symbol	Displays when battery is charging	
Mains Symbol	Displays plug symbol	
Fault Symbol	Displays if there any fault or trip condition	

Technical Specifications

Model Name	SOLARVERTER 2KVA	SOLARVERTER 3KVA
ALARMS		
UPS ON	2 Beep of 1 Seconds each	
Low Battery Cut	1 Beep of 10 Seconds	
Battery High Cut	Continues Beep of 0.5 Seconds until fault reset	
No Load shutdown	1 Beep of 5 Seconds	
Short Circuit	1 Beep of 10 Seconds	
Overload shutdown	1 Beep for 10 Seconds Retry -5times	
Low Battery Warning	1 Beep for 0.5 Seconds for every 30 Seconds	
Over Temperature	Single Beep for 10 Seconds	
Temp. Sensor Failed	Single Beep for 10 Seconds	
ENVIRONMENT		
Operating Temperature	0-45°C (32-113°F)	
Storage Temperature	0-45°C (32-113°F)	
Humidity	0 ~ 95% RH No condensing	

Due to continuous product improvement, the specifications are subject to change without notice.
***AC (Air Conditioner) Operating Mode :** For Normal AC, unit to be used in UPS Mode only. * TDR ON Time of SOLARVERTER 3KVA-48V is 60-120second and it can add additional 2min. delay in AC startup during power failure.
• Recommended AC rating upto: 1 Ton. • Recommended AC current upto: 9Aac.

Off Grid

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SOLARVERTER PRO PCU

Off Grid

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 grid conditions, Solarverter PRO is available from 2kVA to 10kVA.



High Efficiency MPPT

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.

IEC Certified
Product certified as per IEC standards

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

Scan QR Code for Product Video

youtube/c/LuminousGlobal

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	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
SOLARVERTER PRO 5KVA	150Ah x 4	330Wp x 15 Nos.	3 (S) 5 (P)	500
SOLARVERTER PRO 7.5KVA	150Ah x 8	330Wp x 20 Nos.	4 (S) 5 (P)	700
SOLARVERTER PRO 10KVA	150Ah x 10	330Wp x 30 Nos.	6 (S) 5 (P)	1000

Schematic Representation



Off Grid

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Technical Specifications

Model Name	SOLARVERTER PRO 2KVA	SOLARVERTER PRO 3KVA	SOLARVERTER PRO 5KVA
Capacity	2KVA	3KVA	5KVA
Nominal Battery Voltage (Vdc)	24V	36V	48V
Output Waveform	Sine Wave		
SOLAR PHOTOVOLTAIC INPUT			
Type of Charger	MPPT		
Maximum PV power (kW)	2500W	3500W	5000W
Solar Input Voltage (Voc)	57V-100V	75V-150V	130V-220V
Solar Input Voltage range (Vmp)	45V-85V	60V-120V	110V-180V
Max. PV Input Current (Imp)	38A	38A	40A
Nominal Battery Charging Current (At STC)	91A±2A	12-14 A (By default)	10-12 A (By default)
Max. Battery Charging Current (Regulation)	22-23 A		
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		140-280Vac
Input Protection	MCB		
BATTERY			
No. of Batteries	2	3	4
Charging Stages	Boost, Absorption, Float		
Battery Charging Current	0-4 to 20A		
Type of Battery	Tubular/SMF/Flat		
UPS			
Switching Element	MOSFET		IGBT
Control	16 Bit DSP controlled		32 Bit DSP controlled
Nominal Output Voltage (V)	230V ± 2%		230V ± 10%
Output Supply Phase	1 Phase 3 Wire		1 Phase 2 Wire
Nominal Frequency	50 Hz		
Nominal Output Current	7.5A	11A	17.5A+/-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	IP-21		IP20
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		511x300x484
Net Weight (Kg)	25kg	32.5kg	54kg

Technical specifications are subject to change without prior notice.

Technical Specifications

Model Name	SOLARVERTER PRO 7.5KVA	SOLARVERTER PRO 10KVA
Capacity	7.5KVA	10KVA
Nominal Battery Voltage (Vdc)	96V	120V
Output Waveform	Sine Wave	
SOLAR PHOTOVOLTAIC INPUT		
Type of Charger	MPPT	
Maximum PV power (kW)	7500W	10000W
Solar Input Voltage (Voc)	250V-480V	300V-500V
Solar Input Voltage range (Vmp)	200V-400V	250V-450V
Max. PV Input Current (Imp)	**45-50A**	**40A**
Nominal Battery Charging Current (At STC)	12-14 A (By default)	10-12 A (By default)
Max. Battery Charging Current (Regulation)	**22-23 A**	
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	**MCB**	
BATTERY		
No. of Batteries	8	10
Charging Stages	Boost, Absorption, Float	
Battery Charging Current	**0-4 to 20A**	**0-4 to 20A**
Type of Battery	Tubular/SMF/Flat	
UPS		
Switching Element	IGBT	
Control	32 Bit DSP controlled	
Nominal Output Voltage (V)	230V ± 10%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	26+/-1A	34+/-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	IP-20	
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	740x400x500
Net Weight (Kg)	25kg	32.5kg

Off Grid

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RAYVERTER

Off Grid High Frequency

It is a multi-functional inverter/charger combining the functions of an inverter, a solar charger, and a battery to offer uninterruptible power support in a compact size.





Detachable LCD control module with various communications

Reserved communication port (RS485, CAN-BUS or RS232) for BMS

Battery independent design

Battery equalization Extends Lifecycle

Supports USB on the go function

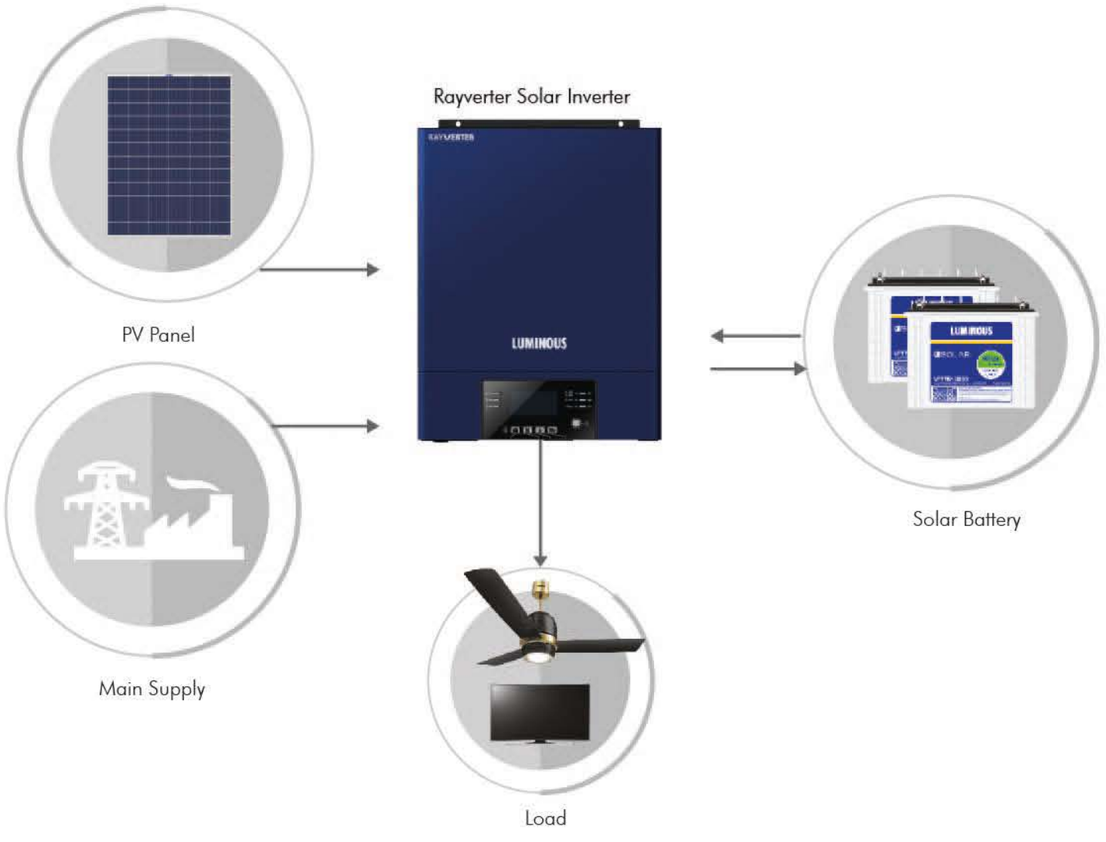
Scan QR Code for Product Video

youtube/c/LuminousGlobal

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
Solar Offgrid 3KVA/24V	200Ah x 2	330Wp x 12 Nos	3(S)4(P)	400
Solar Offgrid 4KVA/24V	200Ah x 2	330Wp x 15 Nos	3(S)5(P)	550
Solar Offgrid 5KVA/48V	200Ah x 4	330Wp x 15 Nos	3(S)5(P)	550
Solar Offgrid 6KVA/48V	200Ah x 4	500Wp x 12 Nos	3(S)4(P)	650

Schematic Representation



Off Grid

SOLAR

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Technical Specifications

Model Name	Rayverter Lite Connect	Rayverter Pro Connect	Rayverter Pro BLE + Connect
	3KVA/24V	3KVA/24V	3KVA/24V
Rated Power	3000VA/3000W	3000VA/3000W	3000VA/3000W
INPUT			
Voltage	230 VAC	230 VAC	230 VAC
Selectable Voltage Range	170 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	170 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	170 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)	50 Hz/60 Hz (Auto sensing)	50 Hz/60 Hz (Auto sensing)
OUTPUT			
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%
Surge Power	6000VA	6000VA	6000VA
Efficiency (Peak)	93%	93%	90% ~ 93%
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)	10 ms (For Personal Computers) 20 ms (For Home Appliances)	15 ms (For Personal Computers) 20 ms (For Home Appliances)
Waveform	Pure sine wave	Pure sine wave	Pure sine wave
BATTERY			
Battery Voltage	24 VD	24 VD	24 VDC
Floating Charge Voltage	27 VD	27 VD	27 VDC
Overcharge Protection	33 VD	32 VD	33 VDC
SOLAR CHARGER & AC CHARGER			
Solar Charger type	MPPT	MPPT	MPPT
Maximum PV Array Power	1500W	3000W	3000W
MPPT Range @ Operating Voltage	30 ~ 115 VD	60 ~ 400 VD	120 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VD	145 VDC	500 VDC
Maximum Solar Charge Current	60A	80A	100A
Maximum AC Charge Current	60A	80A	100A
Maximum Charge Current	120A	80A	100A
PHYSICAL			
Dimension, D*W*H (mm)	100x300x440	100x288x390	115x300x400
Net Weight (Kg)	9.5	8	9
Communication Interface	USB/RS232	S232	USB/RS232/RSS485/Bluetooth Dry-contact
OPERATING ENVIRONMENT			
Humidity	5% to 95% Relative Humidity (Non-condensing)	5% to 95% Relative Humidity (Non-condensing)	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C	-10°C to 50°C	-1°C to 5°C
Storage Temperature	-15°C to 60°C	-15°C to 60°C	-15°C to 6°C

* Product specifications are subject to change without further notice.

Technical Specifications

Model Name	Rayverter Pro BLE + Connect	Rayverter Smart + Connect		Rayverter MAX BLE	
	5KVA/48V	3KVA/24V	6KVA/48V	5KVA/48V	6KVA/48V
Rated Power	5000VA/5000W	4000VA/4000W	6000VA/6000W	5000VA/5000W	6000VA/6000W
INPUT					
Voltage	230 VAC	230 VAC		230 VAC	
Selectable Voltage Range	170 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	170-280 VAC (For Personal Computers)		170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	50 Hz/60 Hz (Auto sensing)		50 Hz/60 Hz (Auto sensing)	
OUTPUT					
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	230VAC ± 10%		230VAC ± 5%	
Surge Power	10000VA	8000VA	12000VA		
Efficiency (Peak)	90% ~ 93%	90%	93%	90%	
Transfer Time	15 ms (For Personal Computers) 20 ms (For Home Appliances)	10 ms (For Personal Computers) 20 ms (For Home Appliances)		10 ms (For Personal Computers) 20 ms (For Home Appliances)	
Waveform	Pure sine wave	Pure sine wave		Pure sine wave	
BATTERY					
Battery Voltage	48 VDC	24 VD	48 VD	48 VD	
Floating Charge Voltage	54 VDC	27 VD	54 VD	54 VD	
Overcharge Protection	63 VDC	33 VD	63 VD	66 VD	
SOLAR CHARGER & AC CHARGER					
Solar Charger type	MPPT	MPPT		MPPT	
Maximum PV Array Power	5000W	5000VA	6000VA	5000VA	6000VA
MPPT Range @ Operating Voltage	120 ~ 450 VDC	60 ~ 450 VD		120 ~ 430 VD	
Maximum PV Array Open Circuit Voltage	500 VDC	500 VD		500 VD	
Maximum Solar Charge Current	100A	120A		100A	120A
Maximum AC Charge Current	100A	100A		100A	120A
Maximum Charge Current	100A	120A		100A	120A
PHYSICAL					
Dimension, D*W*H (mm)	115x300x400	119x313.6x457.5		140x295x468	
Net Weight (Kg)	10	10	12	12	
Communication Interface	USB/RS232/RSS485/Bluetooth/Dry-contact	S232		USB, RS232, RS485, Bluetooth	
OPERATING ENVIRONMENT					
Humidity	5% to 95% Relative Humidity (Non-condensing)	5% to 95% Relative Humidity (Non-condensing)		5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-1°C to 5°C	-10°C to 50°C		-10°C to 50°C	
Storage Temperature	-15°C to 6°C	-15°C to 60°C		-15°C to 60°C	

* Product specifications are subject to change without further notice.

Off Grid

SOLAR

LUMINOUS

ON GRID



SOLAR

LUMINOUS

NXI GRID TIE INVERTER

On Grid

The NXi range from Luminous is available in single and three phase configurations. With it's best-in-class reliability and compliance to safety standards, the inverters are available in capacities from 1kW to 110 kW.



Parallel Connectivity

> 97% Efficiency

Connectivity Options

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

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

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

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

IEC Compliance
Complies with MNRE recommended standards IEC - 61683, IEC – 60068, IEC – 61000, IEC – 61727, IEC – 62116

Scan QR Code for Product Video

youtube/c/LuminousGlobal

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

Schematic Representation



On Grid

SOLAR

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.

On Grid

SOLAR

LUMINOUS

Three Phase

MODEL	Nxi 320	Nxi 325	Nxi 330	Nxi 350	Nxi 3600	Nxi 380
Input DC						
Max. DC Input Power (kW)	24	33	39	55	72	112
Max. DC Input Voltage (V)	1000	1100			1100	
Start-up Voltage [V]	180			200		
MPPT Voltage range (V)	160 - 1000	200 - 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	26A+26A+26A+26A +26A+26A+26A+26A
Number of MPPT	2	3		4	4	8
Max Input Strings Number	4	6		12	12	16
Output (AC)						
Rated output power (kW)	20	25	30	50	60	80
Max. output power [kW]	22	27.5	33	55	66	88
Max. output Current [A]	33.3	27.5	33	83.3	100	88
Grid voltage range (V)	313 - 470	220-400		304-460		230-480
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 2X 20Z					
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
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
Net weight (Kg)	19.9	45		63	69	85
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

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

Three Phase

MODEL	Nxi 3100	Nxi 3110
Input DC		
Max. DC Input Power (kW)	110	121
Max. DC Input Voltage (V)	1100	
Start-up Voltage [V]	195	
MPPT Voltage range (V)	180 - 1000	
Max input current per MPPT (A)	22A+22A	
Number of MPPT	2	
Max Input Strings Number	20	
Output (AC)		
Rated output power (kW)	100	110
Max. output power [kW]	110	121
Max. output Current [A]	167.1	183.8
Grid voltage range (V)	220 - 400	
Grid Frequency range (Hz)	50/60 Hz	
Power Factor (at rated output power)	0.8 ...1... 0.8	
Total harmonic distortion [THDi]	<3%	
Feed-in phase/connection phase	Three Phase	
Efficiency		
Max. Efficiency	99%	
MPPT Efficiency	99.50%	
Protection		
Inbuilt Protections	DC Reverse Polarity Protection	
Interface		
DC Connection	MC4 Connectors	
Display	LCD 2X 20Z	
Datalogger & Communication	4 pins RS485 connector	
General Data		
Topology	Transformerless	
Consumption @ night	< 2 W	
Operating Temperature Range	-25°C to 60°C	
Cooling Method	fan cooling	
Relative Humidity	0 to 100%	
Max. Operational Altitude	4000m	
Noise [dBA]	<55 dBA	<65 dBA
Designed Lifetime	> 20 years	
Ingress Protection	IP66	
Dimensions (W*H*D) [mm]	1050W*567H*286.5D	1065W*567H*344.5D
Net weight (Kg)	85	84
Standards		
Safety/EMC	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, IEC 61683, IEC 60068, IEC 61727, IEC 62116	

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

On Grid

SOLAR

LUMINOUS

RAYVERTER

Hybrid High Frequency

Enjoy the technology as it offers high flexibility for future power expansion and with the battery independence feature, it will keep the inverter running whether it is connected or not.



Pure sine wave output

Self-Consumption

Monitoring Software

Programmable supply
priority for PV, Battery or Grid

Programmable multiple
operation modes: Grid-tie, off-grid and grid-tie with backup

Wall Mounted
Saves space and is easy to access

User-adjustable charging
current and voltage

Parallel operation
up to 9 units only for 3KW and 5KW models

Scan QR Code for Product Video

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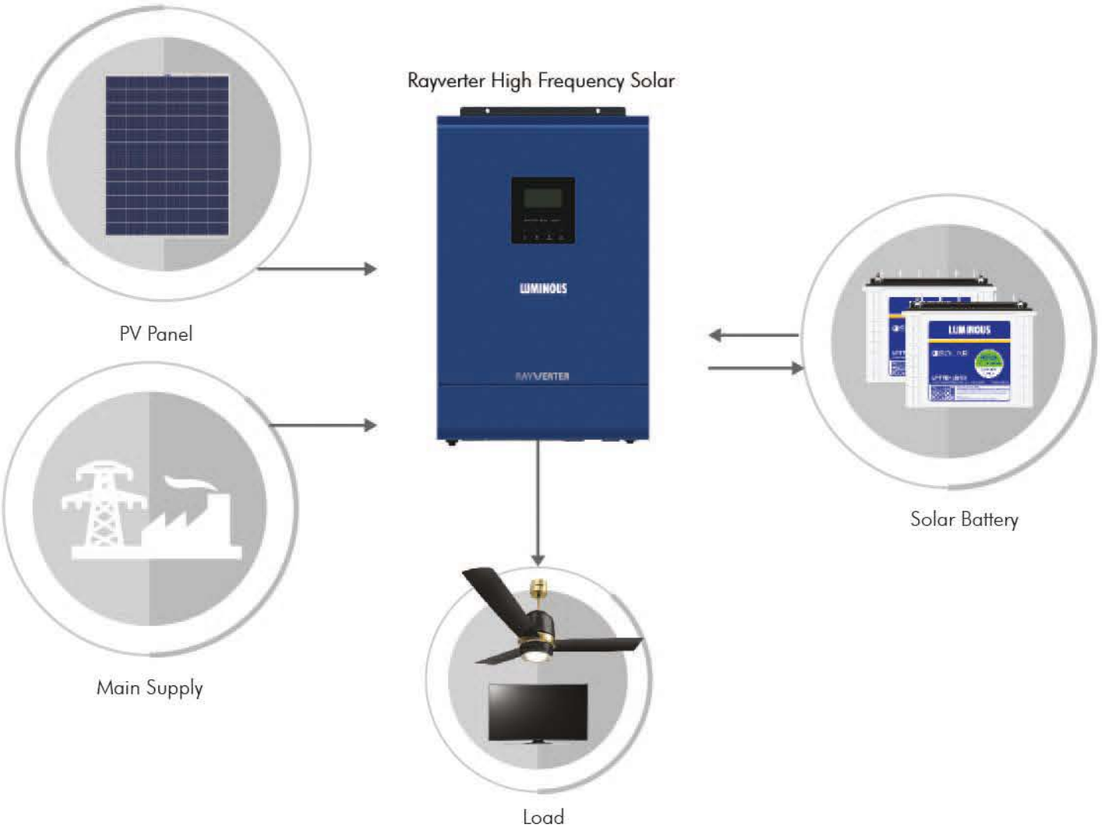
Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
Solar Hybrid 3KVA/24V	200Ah X 2	330Wp X 12 Nos	3(S)4(P)	400
Solar Hybrid 5KVA/48V	200Ah X 4	330Wp X 15 Nos	3(S)5(P)	550

Schematic Representation



Hybrid

SOLAR

LUMINOUS

Technical Specifications

Model Name	Solar Hybrid 3KVA/24V	Solar Hybrid 5KVA/48V
PHASE	1-phase in / 1-phase out	
Maximum PV Input Power	4000W	5000W
Rated Out Power	3000W	5000W
Maximum Charging Power	2880W	5000W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 450 VDC	360 VDC / 450 VDC
Start-up Voltage /Initial Feeding Voltage	130 VDC / 150 VDC	130 VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers/ Maximum Input Current	1 / 18A	1 / 18A
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)	
Nominal Output Current	13A	21.7A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	95%	95%
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 14 VAC / 180 VAC	
Acceptable Input Voltage Range	90 - 280 VDC or 170 - 280 VAC	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
Maximum AC Input Current	40A	40A
PV INPUT (DC)		
Maximum DC Voltage	450 VDC	450 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers/ Maximum Input Current	1 / 18A	1 / 18A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	93%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 450 VDC	360 VDC / 450 VDC
Start-up Voltage / Initial Feeding Voltage	130 VDC / 150 VDC	130 VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC / 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18A	1 / 18A

Technical Specifications

Model Name	Solar Hybrid 3KVA/24V	Solar Hybrid 5KVA/48V
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Voltage Range	184 - 264.5 VAC 0r 195.5 -253 VAC (Selectable)	
Nominal Output Current	13A	21.7A
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC	
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC	
Maximum AC Input Current	40 A	40 A
BATTERY MODE OUTOUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Wavwform	Pure sine wave	
Efficiency (DC to AC)	93%	
BATTERY & CHAGER		
Nominal DC Voltage	24 VDC	48 VDC
Maximum Solar Charging Current	60 A	100 A
Maximum AC Charging Current	60 A	100 A
Maximum Charging Current	60 A	100 A
GENERAL		
PHYSICAL		
Dimension, D*W*H	120x295x468	120x295x468
Net Weight (kgs)	11	12
INTERFACE		
Parallel Function	Yes, 9 units	Yes, 9 units
Communication Port	USB or RS-232/Dry Contact	
ENVIRONMENT		
Humidity	0 ~ 90% RH (No condensing)	
Operating Temperature	- 10°C to 50°C	

Hybrid

SOLAR

LUMINOUS

HYBRID TX

Hybrid Low Frequency

The Luminous hybrid inverter range combines on-grid and off-grid inverters, making it more versatile than other solar inverters and helping to lower your electricity bills while protecting against power outages. It can supply solar power to run your electrical appliances, store electricity in batteries required during power outages, and export excess power generated to the grid. It is available in 3.75kVA and 5kVA capacities.



Remote Monitoring

Savings & Backup Together

Safe and Reliable

Export Excess Power Generated & Also Get Backup
Store electricity in batteries for backup as well as export excess electricity to the 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
During a power outage, disconnects the inverter from the grid, preventing any electrical shock to the linemen on the job.

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

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

Scan QR Code for Product Video

youtube/c/LuminousGlobal

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	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.	3 (S) 4 (P)	350-400

Schematic Representation



Hybrid

SOLAR

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 (%)	93%	
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	
Power Factor	0.9 lag to 0.9 lead	
Nominal Output Current (A)	13A	17A
Output Voltage Distortion (THD)	<4%	
Overload at nominal output voltage	110% for 10 minutes, 125% for 1 minute, 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	350 x 635 x 589
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	

Hybrid

SOLAR

LUMINOUS

DC SOLUTION



LUMINOUS

SHINE RETROFIT

DC Solution

Shine Retrofit is a smart upgrade that converts existing inverter into a 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.

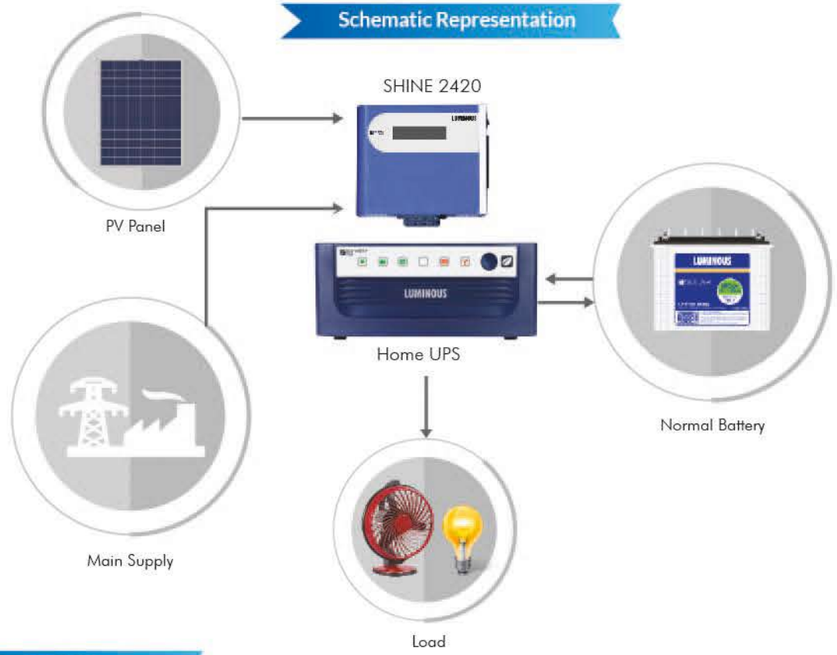
Scan QR Code for Product Video

youtube/c/LuminousGlobal

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	165Wp 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	165Wp x 15 No.s	3 (S) 5 (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

Schematic Representation



Technical Specifications

Model Name	Shine 1220	Shine 2420	Shine 3650	Shine 4850	Shine 9650	Shine 12050
Specifications	Parameters					
System rating	20A @12V	20A @12V/24V	50A@24V/36V	50A @48V	50A @96V	50A @120V
Solar panel compatible wattage	100Wp-400Wp @ 12V	100Wp-400Wp @ 12V 200Wp-800Wp @24V	100Wp-1200Wp @ 24V 1000Wp-2400Wp @36V	Upto 2800 Wp	Upto 5600 Wp	Upto 7000 Wp
Maximum solar panel voltage	25V	45V	55V/75V	90V	180V	230V
Operating temperature range	0°C to + 45°C	0°C to + 45°C	45°C	0°C to + 45°C		
Power connection	30A Terminal Block	30A Terminal Block	60A Terminal Block	60A Terminal Block		
Wire size	6mm² Maximum	6mm² Maximum	16mm² Maximum	16mm² Maximum		
Dimension (mm)	178x71x159		280x130x205	375x315x135		
Weight (kg)	1.2	1.2	2.88	4.5		

Technical specifications are subject to change without prior notice.

DC Solution

SOLAR

LUMINOUS

SOLAR CHARGE CONTROLLER

DC Solution

Luminous PWM Charge controllers have efficiency of upto 98%. They charge batteries from solar panels without permitting overcharge and also prevent reverse current flow at night.



Automatic selection of 12V/24V battery

Aesthetic & compact design

USB port

Fuseless electronic & software controlled protection

Load controller with LVD

Max. utilization of solar power

20% extra power handling capability

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Technical Specifications

Model Name	SCC1206NM	SCC1210NM*	SCC1220NM	SCC1225NM
System rating	6A @ 12V	10A @ 12V / 24V	20A @ 12V / 24V	25A @ 12V / 24V
Technology	PWM			
Maximum solar panel wattage	125Wp @ 12V	200Wp @ 12V/400Wp @ 24V	400Wp @ 12V/800Wp @ 24V	500Wp @ 12V/900Wp @ 24V
Maximum solar panel voltage	25V	25V/45V		
Low voltage disconnect				
A) By state of charge	N.A	Available		
B) Controlled by voltage	Available			
Battery type selection	Lead Acid & SMF			
Self consumption	Less than 10mA			
Efficiency:				
A) Charging	98.5%		96%	96%
B) Load	98%		96%	96%
Operating temperature range	0°C to 50°C			
Power connections	30 Ampere Terminal			
Wire size	Recommended 2.5 sq. mm	Recommended 4 sq. mm	Recommended 6 sq. mm	Recommended 4 sq. mm
Enclosure	ABS Plastic, IP21			
Dimensions (mm)	40 x 60 x 135 (L x W x H)			
Net weight	275 gms	300 gms	350 gms	350 gms

* Available with dusk to dawn feature

LUMINOUS

BATTERIES & PANELS



SOLAR

LUMINOUS

PV PANELS

Designed For High Performance

Luminous has both Monocrystalline and Polycrystalline PV modules with performance warranty of up to 25 Yrs. They are certified for compliance to IEC standard.

Range available with us is from 165 Watt to 670 Watt catering to wide range of applications from rural to urban projects.



10 Years Warranty on 90% of the Nominal Power

25 Years Warranty on 80%of the Nominal Power

Robust Mechanical Design

Best in class conversion efficiency
Higher cell efficiency means optimum output

Anti reflective coating and back surface field (BSF)
More light absorption

Optically, mechanically and electrically tested
Frame reduces resistance and thus improves cell efficiency

Advance EVA encapsulation
Multi layer encapsulation provides better module protection

Strong light weight Aluminum frame design
Offers high torsion resistance against wind load and snow loads

Compliance to IEC standards IEC 61215 & 61730

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Technical Specification of Mono PV Panels

Model	Wattage Wp	Cell Type	Number of Cells	Max-power Voltage Vmp (V)	Open Circuit Voltage Voc (V)	Max-power Current Imp (A)	Short Circuit Current Isc (A)	Module Efficiency (%)	Panel Dimension (mm) LxWxH
LUM 200MP-36	200W	Mono PERC	36	20.14	24.28	9.94	10.51	19.37	1505x686x35 mm
LUM 375MP-66	375W	Mono PERC	66	36.96	45.28	10.01	10.56	20.84	1820x1002x35 mm
LUM 400MP-72	400W	Mono PERC	72	19.97	24.27	20.04	21.10	20.12	1986x1001x35 mm
LUM 400MP-72	400W	Mono PERC	72	39.95	48.55	10.02	10.55	20.12	1986x1001x35 mm
LUM 410MP-54	410W	Mono PERC half cut	108	31.84	37.68	12.88	13.59	20.99	1722x1134x35 mm
LUM 450MP-60	450W	Mono PERC half cut	120	41.33	34.70	13.86	12.97	20.80	1908x1134x35 mm
LUM 540MP-144	540W	Mono PERC half cut	144	41.92	49.40	12.89	13.72	20.89	2279x1134x35 mm
LUM 550MP-144	550W	Mono PERC half cut	144	41.95	49.80	13.12	13.98	21.28	2279x1134x35 mm
LUM 550MP-72	550W	Mono PERC half cut	144	40.83	49.60	13.48	14.04	21.28	2279x1134x35 mm
LUM 550MP-55	550W	Mono PERC half cut	110	31.62	37.95	17.40	18.52	21.05	2394x1096x35 mm
LUM 600MP-60	600W	Mono PERC half cut	120	34.42	41.52	17.44	18.52	21.20	2172x1303x35 mm
LUM 670MP-66	670W	Mono PERC half cut	132	38.02	46.05	17.63	18.75	21.57	2384x1303x35 mm

*STC (Standard test condition) Irradiance: 1000W/m2, cell temperature 25C, spectral range AM 1.5

Technical Specification of Poly PV Panels

Model	Wattage Wp	Number of Cells	Max-power Voltage Vmp (V)	Open Circuit Voltage Voc (V)	Max-power Current Imp (A)	Short Circuit Current Isc (A)	Module Efficiency (%)	Panel Dimension (mm) LxWxH
LUM 165P-36	165W	36	19.11	23.40	8.60	9.07	16.76	1480x665x30 mm
LUM 170P-36	170W	36	18.86	23.01	9.02	9.61	16.46	1505x686x35 mm
LUM 275P-60	275W	60	31.65	38.91	8.69	9.20	16.90	1640x992x35 mm
LUM 330P-72	330W	72	37.80	46.90	8.70	9.14	17.01	1956x992x35 mm
LUM 330P-72	330W	72	38.03	45.53	8.68	9.22	16.85	1976x996x35 mm
LUM 335P-72	335W	72	38.08	46.02	8.80	9.43	16.85	1986x1001x35 mm
LUM 340P-72	340W	72	19.08	23.17	17.82	18.94	17.10	1986x1001x35 mm
LUM 340P-72	340W	72	38.17	46.34	8.91	9.47	17.10	1986x1001x35 mm

*STC (Standard test condition) Irradiance: 1000W/m2, cell temperature 25C, spectral range AM 1.5

SOLAR

LUMINOUS

SOLAR BATTERY

Harness the Power of Sun

Now harness the power of Sun with Luminous Solar batteries. Luminous Solar Batteries are C10-rated deep-cycle batteries that are specially designed for longer backup and are the most reliable in terms of performance and design.



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)

High Charge acceptance
Rugged Performance

Technical Specifications

Model Name	Nominal Voltage	Rated C20 Capacity at 27°C	Dimension of Battery			Height upto Terminal	Electrolyte Volume	Charging Current				Weight
			Length	Width	Height			Boost Mode		Trickle Mode		Net
								Starting	Finishing	Min	Max	
	(V)	(Ah)	mm (±3%)	mm (±3%)	mm (±3%)	mm (±5%)	Ltrs. (±5%)	Amp	Amp	(mA)	(mA)	Kg (±5%)
LPTTEX 12150	12	150	502	191	397	415	20.4	18.0	9.0	150	600	60.00
LPTTEX 12200	12	200	502	191	397	415	21.8	24.0	12.0	200	800	68.00

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