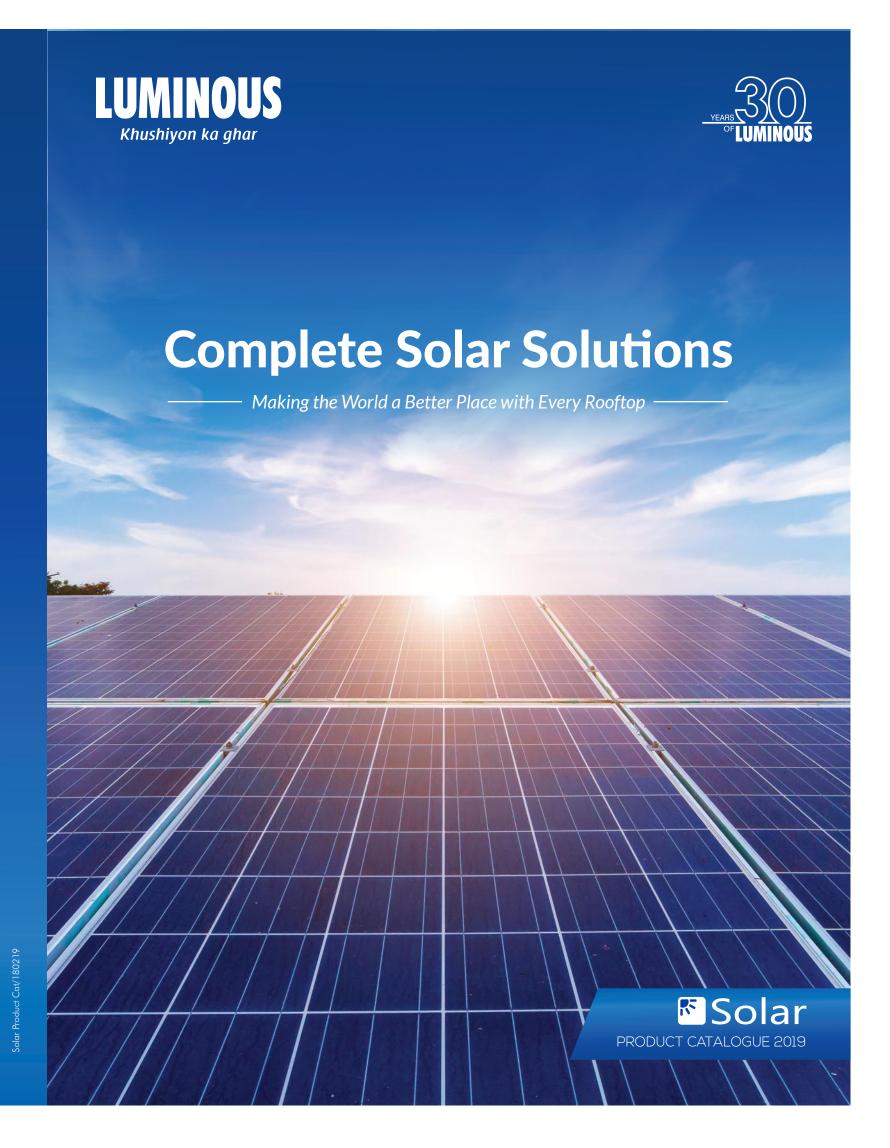
# **Solar** Chalo India Bijli Banao





**Luminous Power Technologies Pvt. Ltd.** 

Plot No. 150, Sector 44, Gurugram, Haryana –122003 Tel.:+91-124-477 6700, E-Mail: care@luminousindia.com





















# WIDEST RANGE OF SOLAR POWER PRODUCTS

















# **PV PANELS**

# Designed For High Performance

Luminous offers a range of both Monocrystalline and Polycrystalline PV modules. Ranging from 40W to 335W, our panels comply with IEC standards and are suitable for a wide range of applications.









25 Years Performance Warranty

5 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.



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

#### Electrical Parameters @ STC#

Model	LUM 1240	LUM 1260	LUM 1280	LUM 12105	LUM 12165	LUM 24325	LUM 24335
Cell Type	Poly	Poly	Poly	Poly	Poly	Poly	Mono
No. of Cells	36	36	36	36	36	72	72
Peak Power PMax (Wp)	40	60	80	105	165	325	335
Rated Module Voltage (V)	12	12	12	12	12	24	24
Maximum Power Voltage Vmp (V)	18	18	18	18.05	18.65	38	38.44
Maximum Power Current Imp (A)	2.23	3.34	4.4	5.82	8.85	8.55	8.71
Open Circuit Volatge Voc (V)	22	22	22	22	22.84	45.5	46.44
Short Circuit Current Isc (A)	2.42	3.64	4.8	6.28	9.55	9.07	9.41
Module Efficiency (%)	13.72%	14.10%	15.21%	15.14%	16.64%	16.60%	17.11%
Maximum System Voltage (V)	600V	600V	600V	600V	600V	1000V	1000V
Maximum Series Fuse Rating	12A	12A	12A	12A	20A	20A	20A

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

#### Mechanical Data

Module Dimensions (mm)	435x670	635x670	785x670	1035x670	1480x670	1976x991	1976x991
LxWxT	x34	x34	x34	x34	x34	x40	x40
Module Weight (kgs)	3.30	5.20	6.50	8.20	11.50	23.00	23.00
IP Rating	IP 65	IP 65	IP 65	IP 65	IP 65	IP 67	IP 67
Cable & Connectors	No cable and connectors			1000mm length cables		1000mm length cables, MC4 Compatible/MC4 Connectors	
Frame			Silver An	nodized aluminium alloy			
Glass		3.2mm thicl	k high transmis	ssion low iron t	empered glass	s, AR coated	
Cell Encapsulant			EVA (Etl	hyelene Vinyl A	Acetate)		
Back Sheet				Composit Film			
Maximum Surface Load Capacity	5400 Pa (Pascals)						
Aplication Class			Clas	s A (Safety Cla	ss II)		

### **Permissible Operating Conditions**

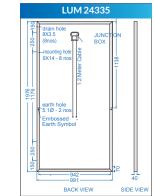
Operating Temperature	-40°C to +85°C
Temp coefficient of Open Circuit Voltage	-0.33 %/℃
Temp coefficient of Short Circuit Current	0.03 %/°C
Temp coefficient of Power	-0.41%/°C

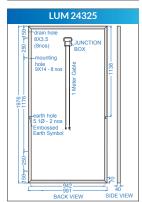
### Warranty and Certifications

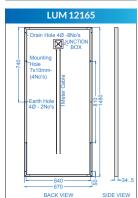
Product Warranty**	5 Years
Performance Warranty**	Linear Performance Warranty for 25 Years with 3% for 1st year degradation and 0.70% from year 2 to 25
Approvals and Certificates	IEC 61215 Ed2, IEC 61701, IEC 61730-1, IEC 61730-2

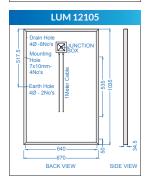
\*\* Refer to Luminous Warranty document for Terms and conditions. Technical specifications are subject to change without prior notice.

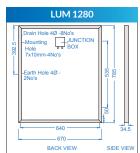
#### **Solar Module Dimension**













# **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 50 kW.









LUMINOUS

5 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.



### **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.



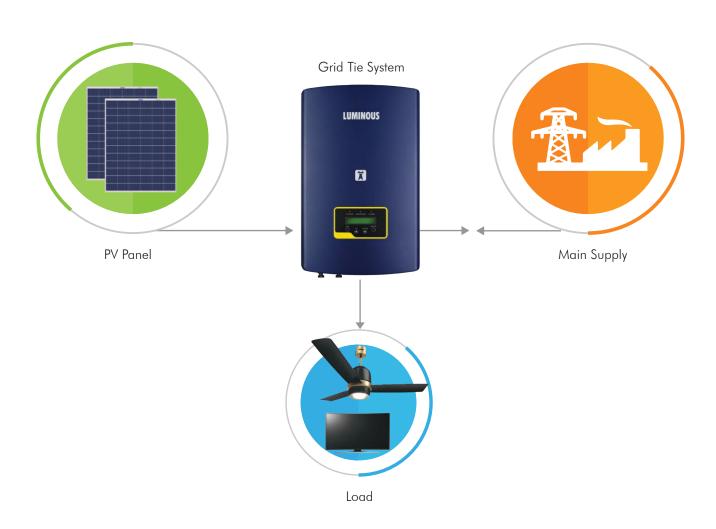
# MNRE & IEC Compliance

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



### **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	325Wp x 3 No.s	1	3 (S)	100
NXI 2kW	325Wp x 6 No.s	1	6 (S)	200
NXI 3kW	325Wp x 10 No.s	1	10 (S)	300
NXI 4kW	325Wp x 12 No.s	2	6 (S)	400
NXI 5kW	325Wp x 16 No.s	2	8 (S)	500
NXI 6kW	325Wp x 20 No.s	2	10 (S)	600
NXI 10kW	325Wp x 32 No.s	2	16 (S)	1000
NXI 15kW	325Wp x 48 No.s	2	12 (S) 2 (P)	1500
NXI 20kW	325Wp x 64 No.s	4	16 (S)	2000
NXI 25kW	325Wp x 84 No.s	4	21 (S)	2500
NXI 50kW	325Wp x 168 No.s	4	21 (S) 2 (P)	5000





# 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	)	12	20				
MPPT Voltage range (V)	50-500	80 -	500	100 -	- 500				
Max input current per MPPT (A)		11A		11A+	+11A				
Number of MPPT		1		2	2				
Max Input Strings Number		1		2	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)			0.81 0.8						
Total harmonic distortion [THDi]			< 1.5%						
Feed-in phase/connection phase			Single Phase						
Efficiency			-						
Max. Efficiency	>97	7.2%	97.5%	> 98.	1%				
MPPT Efficiency			>99.5%						
Protection									
Inbuilt Protections		rotection, Insulation resist		current detection, surge pr	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,				
Interface		•	isianum griotection, temperature Protection						
DC Connection		MCA Connectors							
Display									
			MC4 Connectors  LCD 2X 20 Z						
· · ·		R		nl)					
Datalogger & Communication		R	LCD 2X 20 Z	ıl)					
Datalogger & Communication  General Data		R	LCD 2X 20 Z	nl)					
Datalogger & Communication  General Data  Topology		R	LCD 2X 20 Z S485/GSM/Wifi* (Optiona	11)					
Datalogger & Communication  General Data  Topology  Consumption @ night		R	LCD 2X 20 Z S485/GSM/Wifi* (Optiona Transformerless	ıl)					
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range		R	LCD 2X 20 Z S485/GSM/Wifi* (Optiona Transformerless < 1 W	nl)					
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method		R	LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C	nl)					
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity		R	LCD 2X 20 Z S485/GSM/Wifi* (Optiona  Transformerless  < 1 W  -25°C to 60°C  Natural Convention	11)					
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity  Max. Operational Altitude	<20dB		LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C Natural Convention 0 - 100 %	√30 db	oa				
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity  Max. Operational Altitude  Noise [dBA]	<20dB		LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C Natural Convention 0 - 100 % 4000m		oa e				
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity  Max. Operational Altitude  Noise [dBA]  Designed Lifetime	<20dB		LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C Natural Convention 0 - 100 % 4000m <30dba		pa a				
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity  Max. Operational Altitude  Noise [dBA]  Designed Lifetime  Ingress Protection			LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C Natural Convention 0 - 100 % 4000m <30dba > 20 years						
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity  Max. Operational Altitude  Noise [dBA]  Designed Lifetime  Ingress Protection  Dimensions (W*H*D) [mm]		310W*373H*160D(mm)	LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C Natural Convention 0 - 100 % 4000m <30dba > 20 years IP65	<30 db	H *160D				
Datalogger & Communication  General Data  Topology  Consumption @ night  Operating Temperature Range  Cooling Method  Relative Humidity  Max. Operational Altitude  Noise [dBA]  Designed Lifetime  Ingress Protection		310W*373H*160D(mm)	LCD 2X 20 Z S485/GSM/Wifi* (Optional Transformerless < 1 W -25°C to 60°C Natural Convention 0 - 100 % 4000m <30dba > 20 years	<30 db	H *160D				

### Three Phase

THE SOT HUSS						
MODEL	Nxi 360	Nxi 310	Nxi 315	Nxi 320	Nxi 325	Nxi 350
Input DC						
Max. DC Input Power (kW)	6.9	11.5	16.5	23	28	55
Max. DC Input Voltage (V)			1000			1100
Start-up Voltage [V]		250		35	60	200
MPPT Voltage range (V)			200 - 800			200 - 1000
Max input current per MPPT (A)	15A + 15A	18A+1	ВА	18A+18A+1	8A +18A	28.5A+28.5A+28.5A+28.5A
Number of MPPT		2		4		4
Max Input Strings Number	2	4		8		12
Output (AC)						
Rated output power (kW)	6	10	15	20	25	50
Max. output power [kW]	6.6	11	15	22	27.5	55
Max. output Current [A]	10	16.7	25	33.3	41.7	83.3
Grid voltage range (V)		313 - 470			304-460	
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			Thre	ee Phase		
Efficiency						
Max. Efficiency	9	8.20%	98.30%	98.60	%	98.80%
MPPT Efficiency		99.50%			99.90%	
Protection				•		
Inbuilt Protections	O/P		on, Insulation resistar		D/P Over Current Prot lual current detection, otection	
Interface						
DC Connection			MC4 (	Connectors		
Display	LCD 2X	( 20Z	7" Color Di	splay	LCD	2X 20Z
Datalogger & Communication			RS485/GSM	I/Wifi* (Optional)		
General Data						
Topology			Trans	formerless		
Consumption @ night			•	1 W		
Operating Temperature Range			-25°0	C to 60°C		
Cooling Method		Natural Co	nvention	Ir	telligent redundant fan	cooling
Relative Humidity			0 t	o 100%		
Max. Operational Altitude			4	000m		
Noise [dBA]			<3	30 dBA		
Designed Lifetime			> 2	0 years		
Ingress Protection				IP65		
Dimensions (W*H*D) [mm]	4:	30W*613H*269D	530W*7	00H*356.5D	630W	/*700H *357D
Net weight (Kg)	29		30	57.2	58.2	63
Standards						
Safety/EMC		EN61000 - 6 - 1:	2007, EN61000 - 6 -	3: 2007, IEC 62109-	1, 62109-2: AS3100	

 $<sup>^{\</sup>ast}$  Check availablity of GSM or wifi dongle before ordering.



Technical specifications are subject to change without prior notice.

Technical specifications are subject to change without prior notice.

# 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 1kW to 10kW. Warranty: 2 Years







High Efficiency

User Controlled Settings

Long Power



### **Priority Settings**

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



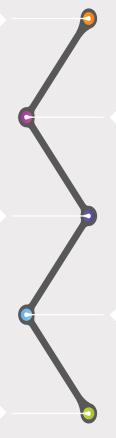
### User-friendly Display

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.



# MNRE & IEC Compliance Complies with MNRE

recommended standards
IEC – 61683, IEC – 60068
– 1,2,14,30, IEC – 60529



#### **Solar Estimation Chart**

	Solution		Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
NXT 1kW	75 Ah x 4	325Wp x 3 No.s	3 (S)	100
NXT 2kW	150 Ah x 4	325Wp x 6 No.s	3 (S) 2 (P)	200
NXT 3kW	200 Ah x 4	325Wp x 9 No.s	3 (S) 3 (P)	300
NXT 6kW	200 Ah x 8	325Wp x 20 No.s	4 (S) 5 (P)	600
NXT 7.5kW	200 Ah x 10	325Wp x 24 No.s	6 (S) 4 (P)	750
NXT 10kW	200 Ah x 10	325Wp x 30 No.s	6 (S) 5 (P)	1000





Model Name	NXT 1kW	NXT 2kW	NXT 3kW	NXT 6kW	NXT 7.5kW	NXT 10kW
Capacity (kW)	1	2	3	6	7.5	10
Nominal Battery Voltage (Vdc)		48V	1	96V	120	V
Output Waveform			Sine	Wave		
SOLAR PHOTOVOLTAIC INPUT						
Type of Charger			М	PPT		
Maximum PV power (kW)	1.1	2.2	3.3	6.6	8.25	11
Input Voltage range (Voc)		80 - 165		160-240	180-3	00
Input Voltage range (Vmp)		65 - 130		120-210	150-2	40
GRID INPUT						
Input Supply Phases			Single	e Phase		
Nominal Voltage & Voltage range			230V AC (	185V - 265V)		
Nominal Frequency & Range				(±3 Hz)		
BATTERY						
Battery recharge current range from Grid Side (A)	0-12	0-24	0-30	0-30	0-35	0-45
Battery recharge current range from Array Side (A)	0-20	0-40	0-60	0-60	0-65	0-80
Charging Stages		Float, Bulk,	l .	1	Boost, Absorpt	
UPS						,
Switching Element		MOSFET			IGBT	
Control	32 Bit DSP controlled					
Nominal Output Vac				% , Single Phase		
Output waveform				Sine Wave		
Nominal Frequency				z (±0.5 Hz)		
Power Factor				to 0.8 lead		
Nominal Output Current (A)	4.3	8.5	13	26	33	44
Overload at nominal output voltage	4.5	0.5		linutes, 200% for 5 Sec		
SYSTEM DATA			110/01011011	111111111111111111111111111111111111111	<b></b>	
Noise @ 1 meter (dBA ± 2dBA)		<58dBA			<62dBA	
Transfer Time		\J00BA		20 mS	NOZUDA	
Protection	Lindo	r/Overveltage protect		t, Battery & Array; Rev	vorce polarity protecti	on for
riotection		• .		Short circuit and Over		
		protection	at Grid/DG Input, E	Sattery, Array Path and	PCU O/P	
Display Parameters		Voltage/Current: Arra	y, Battery, Grid, Out	put; Day kWh, Cumula	ative kWh, Date, Time	!
Indications				d ON, Load ON, UPS ( d, Low Battery, Over To		
Setting	Bat	tery type, Battery volt	age (Boost & Float),	Priority (SGB/SBG), Cl	narging Current from (	Grid
ENVIRONMENT						
IP Protection Level			IF	-21		
Operating Temperature (°C)			0-50 °C withou	t any degradation		
Max. Relative humidity @ 25°C			Up to 95% (n	on-condensing)		
Max. Altitude above sea level without de-rating (m)			10	00 m		
STANDARD COMPLIANCE						
Certifications			IEC 61683, IEC 6	0068-2(1,2 14, 30)		
GENERAL						
Dimension (W*D*H) [mm]		300x504x515		350x635x589	400x575x	783
Net Weight (Kg)	30	37	50	76.3	125	150

 $\label{thm:continuous} \mbox{Technical specifications are subject to change without prior notice.}$ 

For more information



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# HIGH CAPACITY COMBO

# Solar solutions with tough build

Cruze & Shine combination runs heavy loads with extreme ease and efficiency. Available from 2 KVA to 7.5 KVA

Warranty: 2 Years







Heavy Loads

User Friendly Display



# Run Heavy Loads

Runs heavy loads like Geyser, Petrol Pumps, Photocopiers, Dental Chairs etc.



### Intuitive Display

Easy to understand display shows the status of mains availability, battery charging, battery level, etc.



### Pure Sine Wave Output

Ensures noiseless operation and safety of connected appliances.



# ABCC Technology

Adaptive Battery Charging Control System (ABCC) ensures faster battery charging and enhances battery life by 70%.



# **Guaranteed Safety**

Comprehensive protection against short-circuit, reverse polarity, battery over-charge and battery deep-discharge.



### **Solar Estimation Chart**

	Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)		
Solar UPS	Solar Battery	PV Panel Watt		
Cruze 2KVA + Shine 3650	150 Ah x 2	325Wp x 5 No.s	1 (S) 5 (P)	170
Cruze 2.5KVA + Shine 3650	150 Ah x 3	160Wp x 15 No.s	3 (S) 5 (P)	260
Cruze 3.5KVA + Shine 4850	150 Ah x 4	325Wp x 8 No.s	2 (S) 4 (P)	280
Cruze 5.5KVA + Shine 9650	150 Ah x 8	325Wp x 12 No.s	4 (S) 3 (P)	560
Cruze 7.5KVA + Shine 12050	150 Ah x 10	325Wp x 20 No.s	5 (S) 4 (P)	700

### **Technical Specifications**

Model Name		Cruze 2 KVA+Shine 3650	Cruze 2.5 KVA+Shine 3650	Cruze 3.5 KVA+ Shine 4850	Cruze 5.5 KVA+ Shine 9650	Cruze 7.5 KVA+ Shine 12050		
Capacity		2000VA	2500VA	3500VA	5500VA	7500VA		
Nominal Battery Voltage (Vdc	)	24V	36V	48V	96V	120V		
Output Waveform				Sine Wave	1			
SOLAR PHOTOVOLTAIC INP	UT							
Charge Controller Type				PWM				
Charge Controller Rating		50 Amp/24V	50 Amp/36V	50 Amp/48V	50 Amp/96V	50 Amp/120V		
Maximum PV Power		Upto 1700Wp	Upto 2500Wp	Upto 2800Wp	Upto 5600Wp	Upto 7000Wp		
Input Voltage range (Voc)		38-55	57-75	70-92	140-185	170-230		
Input Voltage range (Vmp)		34-39	51-57	60-77	119-153	145-191		
GRID INPUT								
Operating Voltage Range	Operating Voltage Range		100V-285V	100V-285V	140V-280V	140V-280V		
Max Grid Charging Current		21Amp	21Amp	21 Amp	12Amp	12Amp		
PROTECTIONS					'	1		
Protections	Cruze	Overload, Short-circuit, Battery Deep Discharge Protection, & MCB Protection						
Trotections	Shine	Re	verse polarity , reverse cu	ırrent , Over-voltage, Ove	r-temperature protections	1		
DISPLAY INDICATIONS								
Indications	Cruze	Mains	On, UPS On, UPS Overlo	ad, Battery Low, Battery	Charging, Level of Battery	Charge		
Huications	Shine		PV & Grid status, Charging source, Battery type, Battery voltage, Savings					
GENERAL						1		
Net Weight (Kg)	Cruze	22.25	22.25	31.9	59.2	64		
IACE AACIRITE (IVR)	Shine	3	3	4.5	5.7	5.7		
Dimensions LxWxH (mm)	Cruze	280x305x280	280x305x280	280x305x380	588x341x347	600x350x360		
Dimensions ExvvxH (IIIII)	Shine	280x129x205	280x129x205	375x315x135	375x315x135	375x315x135		

Technical specifications are subject to change without prior notice.



# SOLAR INVERTERS

# The Solar Ready UPS

NXG range is a hybrid UPS 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. Available from 300VA to 1500VA.









2 Years Warranty

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.



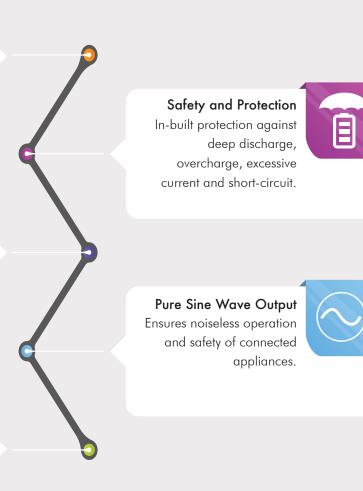
### Fast Charging

i-charge technology enables charging of batteries in a short time. This is a user defined setting.



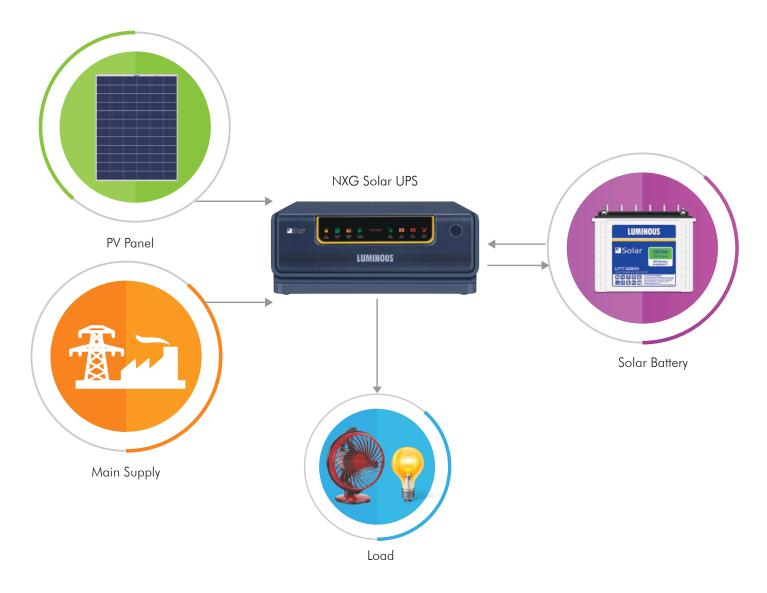
### ECO and UPS Mode

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



### **Solar Estimation Chart**

	Solution		Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
NXG 350	120 Ah x 1	165 Wp x 1 No.s	1 (S)	20
NXG 750	120 Ah x 1	165 Wp x 2 No.s	2 (P)	40
NXG 1100	150 Ah x 1	165 Wp x 4 No.s	4 (P)	80
NXG 1400	150 Ah x 1	165 Wp x 4 No.s	4 (P)	80
NXG 1800	150 Ah x 2	325 Wp x 3 No.s	3 (P)	100





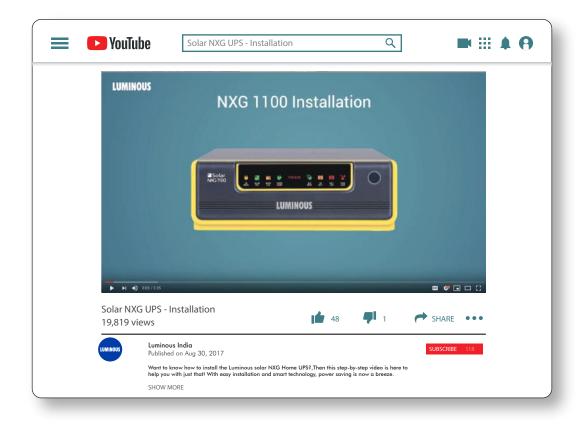
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Model Name	NXG 350	NXG 750	NXG 1100	NXG 1400	NXG 1800		
Capacity (VA)	300VA	500VA	850VA	1100VA	1500VA		
Nominal Battery Voltage (Vdc)	12V	12V	12V	12V	24V		
Output Waveform	Square Wave						
SOLAR PHOTOVOLTAIC INPUT		'					
Charge Controller Type			PWM				
Charge Controller Rating	10Amp/12V 20Amp/12V 40Amp/12V 40Amp/				40Amp/24V		
Maximum PV Power	12V upto 200 Wp	12V upto 400 Wp	12V upto10	00 Wp	24V upto 1000 W		
Input Voltage range (Voc)	19-25	19-25 19-25 19-25 19-25					
Input Voltage range (Vmp)	17-19	17-19	17-19	17-19	34-39		
GRID INPUT							
Operating Voltage Range	90V-290V		100V-29	POV			
GRID OUTPUT							
No Load Output	230±5V	230±10V		220±5V			
Output frequency battery mode			50Hz±0.5Hz				
No load current (UPS switch off)			< 65mA				
UPS efficiency		≥ 80%	*		≥ 85%*		
BATTERY		_ 55/6					
Battery charging through Mains	Main Charge LED Green	Main Charge LED Green Mains LED steady + Mains charge LED steady					
Battery charging through Mains + Solar	Main charge LED Orange						
Battery charging through Solar	Main Charge LED Red  Solar CHG LED Blinking + Mains charge LED OFF						
Low battery pre-alarm indication	Battery low LED blinking						
Solar optimization after battery fully charged	NA	ON mains+no	ower save LED on+ON batt	ery LED on+solar charge LE			
PROTECTIONS	101	OT THAIRS - PC	Well save LEB on Oly Butt	ery LED on solar charge L	D Dimining		
TROTECTIONS	100% % for 5 Sec	110% - 150% for 30 Sec.	110% for 4.5 Min.	110% for 30 Sec.	110% for 4.5 Min		
	10070 70 101 3 300	150%-180% for 10 Sec.	120% for 1 Min	120% for 5 Sec.	120% for 1 Min		
Over load	200%- Short circuit	200%- Short circuit	150% for 10 Sec.	200% for 1 Sec.	150% for 10 Sec.		
	200% Short circuit	NA NA	200% for 1 Sec.	20070 101 1 3ec.	200% for 1 Sec.		
Overload shutdown indication in UPS mode			Overload LED steady		200% 101 1 3ec.		
	NA		<u> </u>				
Overload pre-alarm indication in UPS mode	INA		Overload LED slow blinking				
Short circuit indication in UPS mode		Cl	Overload LED fast blin				
Protections			, overload, high temperatur	· · · · · · · · · · · · · · · · · · ·	.1 #		
Indications	LICD CL	Switch on, Battery Chargi	ng;mains, solar, mains+sola	r; Overload, Short circuit, I-	cnarge"		
Additional features	USB Charging		NA				
DISPLAY INDICATIONS							
	/ === . ==		CO LED ON Switch LED ON				
Switch on indication	UPS / ECO LED ON						
Switch on indication UPS on indication	UPS / ECO LED ON		Switch LED ON Battery LED ON				
Switch on indication UPS on indication	UPS / ECO LED ON NA	NA		Service assistance LED on			
Switch on indication UPS on indication Internal fault	UPS / ECO LED ON	NA		Service assistance LED on			
Switch on indication  UPS on indication  Internal fault  Mains on indication	UPS / ECO LED ON  NA  LED Green	NA 6A (i-Charge Off)/ 10A (i-Charge ON)	Battery LED ON  Mains LED steady	Service assistance LED on A (i-Chg OFF)/15A (i-Chg C	DN)		
Switch on indication  UPS on indication  Internal fault  Mains on indication	UPS / ECO LED ON  NA  LED Green  Mains charge	6A (i-Charge Off)/	Battery LED ON  Mains LED steady		DN)		
Switch on indication  UPS on indication  Internal fault  Mains on indication  Mains charging current selection charge	UPS / ECO LED ON  NA  LED Green  Mains charge  NA	6A (i-Charge Off)/ 10A (i-Charge ON)	Battery LED ON  Mains LED steady	A (i-Chg OFF)/15A (i-Chg C	·		
Switch on indication  UPS on indication  Internal fault  Mains on indication  Mains charging current selection charge  DC overload indication	UPS / ECO LED ON  NA  LED Green  Mains charge  NA	6A (i-Charge Off)/ 10A (i-Charge ON)	Battery LED ON  Mains LED steady	A (i-Chg OFF)/15A (i-Chg C	·		
Switch on indication  UPS on indication  Internal fault  Mains on indication  Mains charging current selection charge  DC overload indication  GENERAL	UPS / ECO LED ON  NA  LED Green  Mains charge  NA  NA	6A (i-Charge Off)/ 10A (i-Charge ON) NA	Battery LED ON  Mains LED steady  10,  (Mains LED	A (i-Chg OFF)/15A (i-Chg C +overload) blinking	NA NA		

Technical specifications are subject to change without prior notice.

#Not applicable for NXG 350 ^Not applicable for NXG 350, NXG 750

For more information



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# 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 <10 KVA







Solar Optimization

User Friendly Display



# Solar Optimization Technique

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



### LCD Display

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



Warranty
1 Year warranty



# Four Stage Charging

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



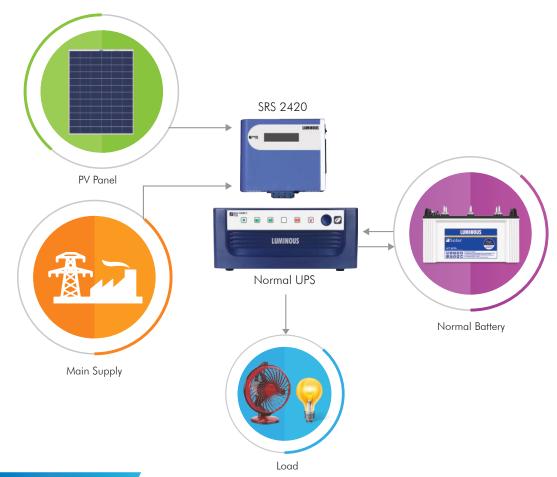
### MCB Protection

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



### **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	325Wp x 2 No.s	2 (P)	80
24V UPS	SHINE 3650	325Wp 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	325Wp x 8 No.s	2 (S) 4 (P)	300
96V UPS	SHINE 9650	325Wp x 16 No.s	4 (S) 4 (P)	600
120V UPS	SHINE 12050	325Wp 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	100\\/= 400\\/= @ 10\/	100Wp-400Wp @ 12V	250Wp-1700Wp @ 24V	Upto 2800 Wp	Upto 5600 Wp	Upto 7000 Wp		
	100Wp-400Wp @ 12V	200Wp-800Wp @24V	375Wp-2500Wp @36V	Ορίο 2800 <b>νν</b> ρ	Ορίο 3000 γγρ			
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	é	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		

 $\label{thm:continuous} Technical specifications are subject to change without prior notice.$ 



# CHARGE CONTROLLER

# Easy upgrade to Solar

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





# Protection Against Over-Charge and Reverse Current

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



Warranty 1 Year Warranty



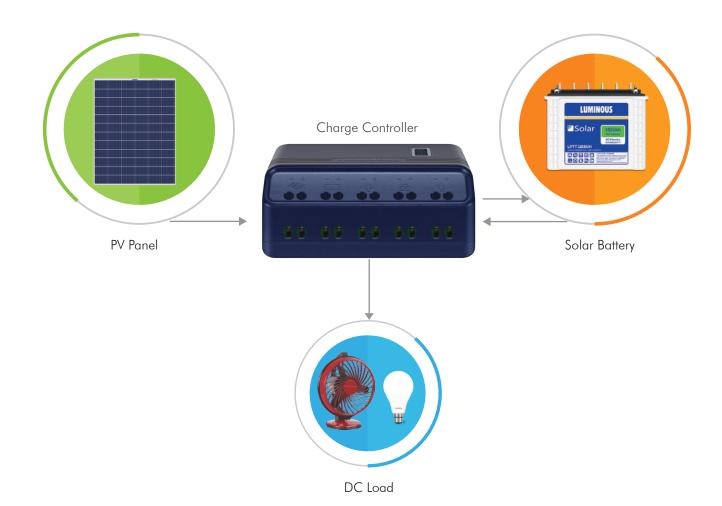
# **USB** Port Charge your DC devices like Mobile, Tablets etc.

directly without using adapter.



### Solar Estimation Chart

	Solution	Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)	
Solar Charge Controller	DC Voltage	PV Panel Watt		
SCC 1206	@12V	105Wp x 1 No.s	1 (S)	10
SCC 1210	@12V	165Wp x 1 No.s	1 (S)	20
SCC 1210	@24V	325Wp x 1 No.s	1 (S)	40
SCC 1220	@12V	165Wp x 2 No.s	2 (P)	40
SCC 1220	@24V	325Wp x 2 No.s	2 (P)	80



### **Technical Specifications**

Model Name	SCC1206NM	SCC1210NM	SCC1220NM			
Charge Controller Type	PWM					
Charge Controller Rating	6A @ 12V	20A @ 12V / 24V				
Maximum PV Power	125Wp @ 12V	200Wp @ 12V/400Wp @ 24V	400Wp @ 12V/800Wp @ 24V			
Input Voltage range (Voc)	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		0°C to 50°C				
Power connections	30 Ampere Terminal					
Battery type selection	Lead Acid & SMF					
Enclosure	ABS Plastic, IP21					
Dimensions (mm)	40 x 60 x 135 (L x W x H)					
Wire size	2.5 sq. mm	4 sq. mm	6 sq. mm			
Net weight	275 gms 300 gms 350 gms					

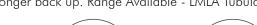
Technical specifications are subject to change without prior notice.



# SOLAR BATTERY

# Power of Performance

Luminous Solar Batteries are C10 rated deep cycle batteries specially designed for longer back up. Range Available - LMLA Tubular 20Ah to 200 Ah











for longer life









# Can handle extreme



### **Technical Specifications**

Model Name	Nominal Voltage	C10 capacity upto10.5V 27O C	Length ±3	Width ±3	Height upto float top ±3	Dry Weight ±3%	Filled Weight ±3%	Electrolyte Volume ±5%
	V	Ah	mm	mm	mm	Kg	Kg	Litre
LPT1220L	12	20	260	172	248	7.5	12.8	4.4
LPT1240H	12	40	412	173	267	13.8	25.2	9.4
LPT1260H	12	60	410	174	305	18.5	31.8	10.9
LPT1280H	12	80	505	220	277	24.0	38.6	12.0
LPTT12100H	12	100	502	191	440	26.1	52.8	22.0
LPTT12120H	12	120	502	191	440	28.8	53.3	22.0
LPTT12150H	12	150	502	191	440	34.8	59.6	20.4
LPTT12200L	12	200	502	191	440	43.9	67.9	19.8

Technical specifications are subject to change without prior notice.

\*STC - Standard Test Conditions



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# Mpartner App

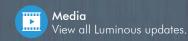
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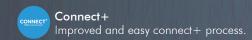
#### Key features

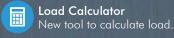












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