Livguard® Solar

Authorised Livguard Partner

My LIV SERV SUPPORT

+91-7428191000
+91-7428191001
+91-7428191002

GET IT ON Google Play

@LivguardEnergy | Livguard Energy | @livguardenergy | @LivguardEnergy | Livguard

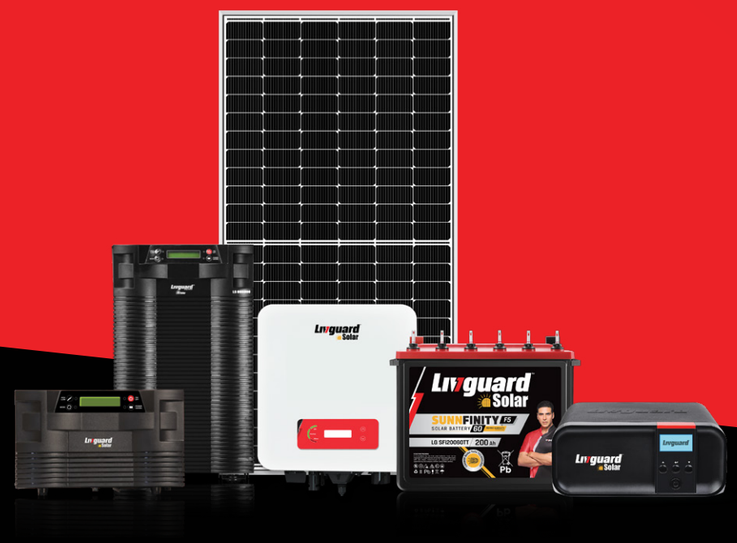
Livguard Energy Technologies Pvt. Ltd.
Plot No.221, Udyog Vihar, Phase-1, Gurugram-122016, Haryana (India),
Tel : +91 - 124 4987400, Fax : +91-124 4987499, Website : www.livguard.com

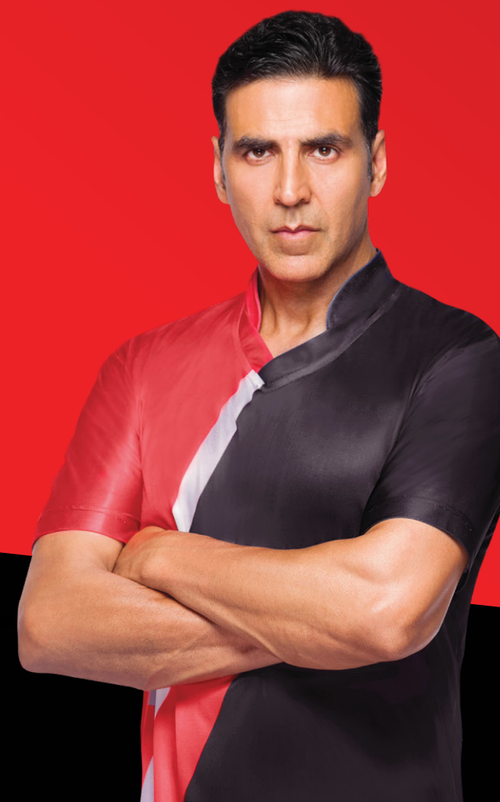
Livguard® Solar

APNI BIJLI BANAO, EXPERT KO BULAO.

SOLAR KE SMART SOLUTIONS GHAR LE AAO!

Call: +91 9999 039 039





ABOUT LIVGUARD

Livguard Energy Technologies Pvt. Ltd. (LETPL) one of India's leading providers for power energy solutions is poised to transform the world with its cutting edge technology, in solar solutions, power back-up, automotive solutions, & e-rickshaw batteries. Livguard was founded in the year 2014 and is a part of the SAR Group which has been serving the nation for the past three decades. With our technologically advanced toolkit and trained technicians we have achieved the customer's trust and faith in our products and services. This has helped us reach the 4,000 crore company milestone in a short period of time.

LIVGUARD SOLAR PRODUCT RANGE

SOLAR PANEL

50 WATT – 600 WATT

SOLAR BATTERY

50 AH - 225 AH

SUNVOLT SOLAR INVERTERS

700VA-1500VA

PWM SOLAR INVERTERS

700 VA – 2200 VA

PWM SOLAR PCU

3.5 KVA – 10 KVA

MPPT SOLAR INVERTERS

1000VA -3000VA

MPPT SOLAR PCU

3 KVA – 15 KVA

HYBRID (GIH) INVERTER

5KVA – 120KVA

ON GRID (GI) INVERTER

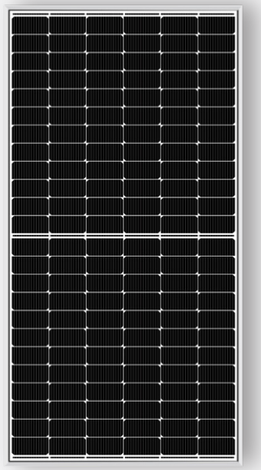
1Phase – 3 kW -6 kW
3Phase – 5 kW – 100 kW

HF SOLAR HYBRID INVERTER

NOVARA SERIES (3.6KW – 5.6KW)

HF OFF GRID INVERTER

ELEGORIA SERIES (3KW – 10KW)

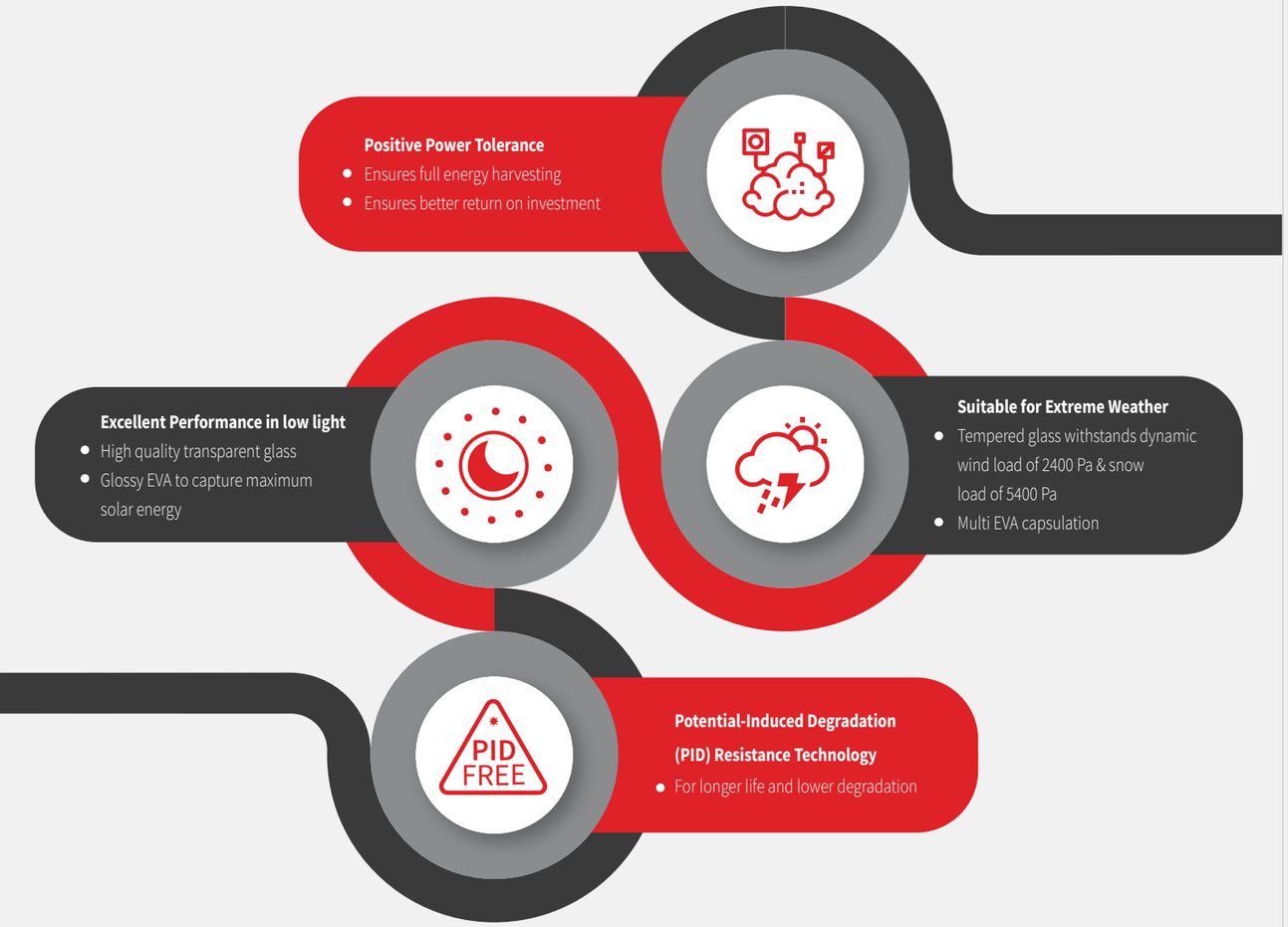


SOLAR PANEL

Livguard Solar Panels are available in Poly-crystalline, Mono PERC & TopCon solar cells, with BIS & IEC compliance ranging for 50Wp - 600Wp panels. Our Panels are ideally suited for rooftop and agricultural applications

12* Years Product Warranty

30 Years Performance Warranty



*12 years product warranty is applicable on the 24V Modules with new warranty T&C mentioned. Refer Warranty Card or Visit our website www.livguardsolar.com to know more on warranty T&C.

12V SOLAR PANEL

Model Name	LGV12V50	LGV12VS150	LGV12V180M	LGTPV12V275W
Power (pm) in Wattage (Nominal)	50	150	180	275
No. of Cells	36	32	32	72
Rated Module Voltage	12	12	12	12
Voltage at Maximum Power (Vmp) in Volts	20.10	16.9	18.01	21.46
Current at Maximum Power (Imp) in Amps	2.58	8.9	9.99	12.82
Open Circuit Voltage (Voc) in Volts	24.09	21.6	22.12	25.09
Short Circuit Current (Isc) in Amps	2.70	9.2	10.37	13.39
Maximum System Voltage (V_{DC})	1500	1000	1000	1000
Module Efficiency ŋ (%)	16.56%	>16%	>18%	20.64
STC: Irradiance 1000W/M^2, Ambient Temperature 25°C, Air Mass 1.5, Measuring Tolerance ± 3%				

24V SOLAR PANELS

Model Name	LGV24VS550WB / LGV24CS550WBDCR	LGTPV560WBNTOPDCR	LGTPV570WBNTOPDCR	LGTPV580WBNTOPDCR	LGTPV590WBNTOP	LGTPV600WBNTOPDCR
Wattage (Watt)	550 (Mono PERC Bi-Facial)	560 (TopCon DCR)	570 (TopCon DCR)	580 (TopCon DCR)	590 (TopCon)	600 (TopCon DCR)
No. of Cells	144	144	144	144	144	144
Rated Module Voltage (V)	24	24	24	24	24	24
Voltage at Max. Power (Vmp)	41.93	44.13	44.47	44.79	42.67	43.9
Current at Max. Power (Imp) Amp	13.12	12.7	12.82	12.95	13.83	13.68
Open Circuit Voltage (Voc) Amp	49.90	52.13	52.49	52.85	51.34	53
Short Circuit Current (Isc) Amp	13.98	13.43	13.57	13.71	14.59	14.63
Max. System Voltage (VDC)	1500	1500	1500	1500	1500	1500
Module Efficiency	21.29	21.74%	22.06%	22.45%	22.84%	23.2%
STC: Irradiance 1000W/M^2 , Ambient Temperature 25°C, Air Mass 1.5, Measuring Tolerance ± 3%						

WARRANTY & CERTIFICATION

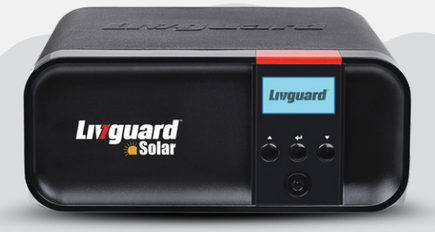
Product Warranty*	5 years on 12V Solar Panels | 12 years on 24V Solar Panels
Performance Warranty*	Linear Performance Warranty: 30 years with 1% for 1st year degradation and 0.45% from year 2 to 30 | 27 years with 1% for 1st years degradation and 0.5% from year 2 to 27 | 25 years with 3% for 1st years degradation and 0.7% from year 2 to 25.
Certificates	BIS certified as per IS/IEC standards

***Refer solar module warranty card document**

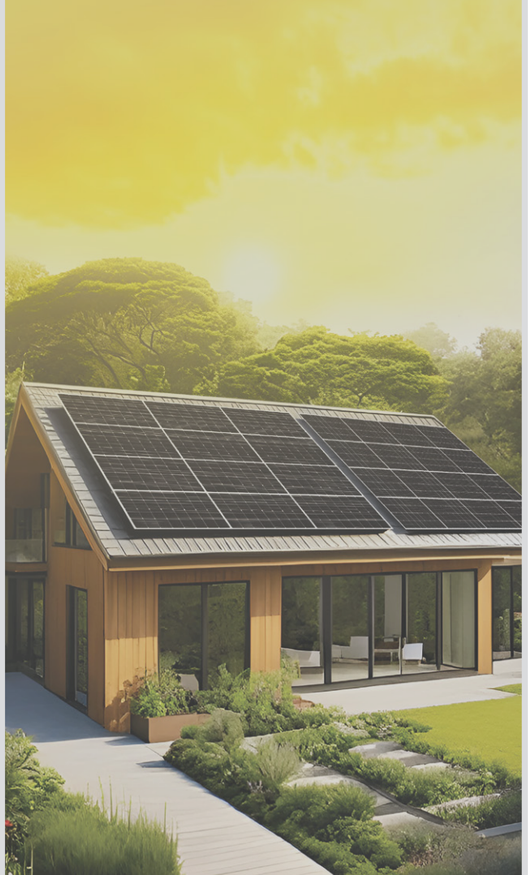
Technical Parameters are subject to change without any prior notice

SunVolt

Solar inverter series smartly utilizes both solar power and grid to run your home appliances efficiently. Equipped with a Heavy Duty Solar Charge Controller, it ensures maximum power extraction from solar panels, significantly reducing your electricity bills



3 Years Warranty



COMPATIBLE WITH 24V SOLAR PANELS
Efficient solar inverter, seamlessly compatible with 24V solar panels.

SMART SOLAR MODES FOR MAXIMUM SAVINGS
Normal Mode, Saving Mode, Max Saving Mode

AUTO BYPASS DURING FAULT
Ensures continuous power supply with auto bypass during inverter faults.

HEAVY DUTY SOLAR CHARGE CONTROLLER
Engineered to deliver maximum solar efficiency with robust protection

UPS MODE
Suitable for sensitive appliances as well as areas with low voltage

FASTER BATTERY CHARGING
Provides maximum battery charging current from grid

USER FRIENDLY LCD DISPLAY
Track solar generation, alarms & system performance with ease

PURE SINE WAVE
Protects your home appliances and ensure noiseless operation

TECHNICAL DATA

Model Name	SunVolt 975+	SunVolt 1175+	SunVolt 1575+	SunVolt 1875+
Capacity (VA)	700 VA	850 VA	1100 VA	1500 VA
Nominal Battery Voltage (Vdc)	12 V			24 V
Output Waveform	Pure Sine Wave			
Switching Element	MOSFET			

SOLAR PV INPUT

Technology	PWM			
Charge Controller Rating (Amps.)	40 A	50 A	65 A	50 A
Maximum PV Power	700 Wp	900 Wp	1100 Wp	1500 Wp
Maximum Input Voltage (Voc)	55V			60V

GRID INPUT

Input Supply	220V Single Phase
Operating Voltage Range (Eco Mode)	100 V - 300 V
Operating Voltage Range (UPS Mode)	180 V - 260 V

OUTPUT

Output Voltage	220V AC ± 10%
Output Frequency Battery Mode	50 ± 0.5 Hz
Changeover Time (UPS Mode)	< 20 ms

USER SELECTABLE SWITCHES

Solar Mode Selections	Normal (Mode 1): Solar + Grid Charging
	Saving (Mode 2): Solar + Conditional Grid Charging
	Max Saving (Mode 3): Solar + Grid Charging and Intelligence
Battery Type Selections	Tubular/Flat Plate/SMF

BATTERY

Number of Batteries	1N-12V	1N-12V	1N-12V	2N-12V
Battery Charging Current through Grid	22A			
Type of Battery	Tubular/Flat Plate/SMF			

OVERLOAD , PROTECTION , LCD DISPLAY & USER INTERFACE

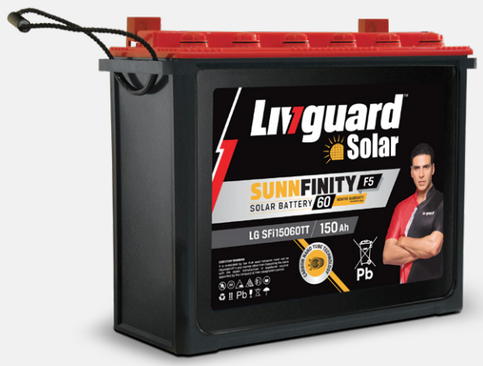
Overload Capacity	>105%
Protection	Low Battery Pre-Alarm, Low Battery, Overload, Short Circuit, Overload Pre-Alarm, Over Temperature, No Load Shutdown, Reverse Polarity, PV Reverse

DISPLAY INDICATIONS	LED INDICATIONS	LCD DISPLAY
Mains ON	Mains ON (LED 1- Steady)	Mains ON, Daily & Total Solar Power Generation, Solar Power, Solar Modes, Battery Type, Load %, ECO/UPS Mode, Solar Max Utilization, Low Battery Pre-alarm, Low Battery Trip, Overload Warning with Pre-alarm, Overload Trip, No Load Shutdown, Short Circuit, Over Temperature, System Error
Charging ON	Charging (LED 2- Steady)	
Charged	Charging Off (LED 2- Off)	
Inverter ON	Inverter ON (LED 3- Steady)	
Low Battery Pre-alarm	Low Battery (LED 5- Blinks)	
Low Battery	Low Battery (LED 5- Steady)	
Overload	Overload (LED 4- Blinks)	
Solar Mode ON	Solar Mode (LED 6- Steady)	
Power Switch ON Indication	Switch ON indication ready	
Over Temperature (PCB)	LED 4 and LED 5 (OL+Low Bat) Steady	
Over Temperature (Transformer)	LED 1 + LED 4 + LED 5 (Mains+OL+Low Bat) Blinks	
No Load Shutdown	LED 3- Blinks	

GENERAL

Operating Temperature	0°C to 45°C			
Relative Humidity	0 - 95% RH (non-condensing)			
Dimensions(LxWxH) in mm	300x275x135 (mm)			
Net Wieght (Kg)	8.6	10.1	13	15.35

Technical Parameters are subject to change without any prior notice



SOLAR BATTERY

Livguard Solar Batteries are C10 rated deep cycle batteries. Innovative Super Tuff 3D design and extra thick tubular plates gives longer backup & battery life.

Super Tuff 3D design Plates

Up to 6 Years Warranty

Super Tuff 3D Grid
- Industry's 1st 3D design with double side pasting
- Ensures longer battery life

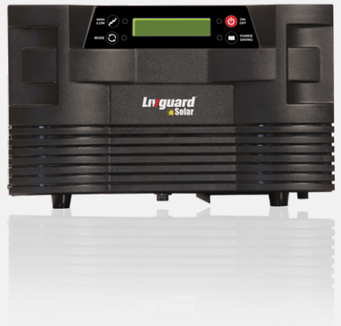
Superior Life Cycle
- Ensures longer battery service life

Tuff Futuristic Design
- Advanced premium design
- Robust high quality durable material

Ultra Low Maintenance
- Topping up frequency – Initially 8 to 10 Months

SPECIFICATION

Model Name	Nominal Voltage (V)	Capacity (Ah)	Filled Weight with Acid ± 3% (Kg)	Battery Dimensions (mm)			Free Replacement Warranty (Months)	Pro Rata Warranty (Months)
				Length ± 3% mm	Width ± 3% mm	Height ± 3% mm		
SFi5060PST	12	50	23.5	410	175	235	36	24
SFi11060PTT	12	110	52.5	505	189	410	36	24
SFi15072PTT	12	150	54	505	189	410	36	36
SFi15060TTN	12	150	61.5	505	189	410	60	-
SFi16572PTT	12	165	59	505	189	410	36	36
SFi20060TT	12	200	64	505	189	410	60	-
SFi20072TTN	12	200	72	505	189	410	36	36
SFi22572PTT	12	225	66.5	505	189	410	36	36



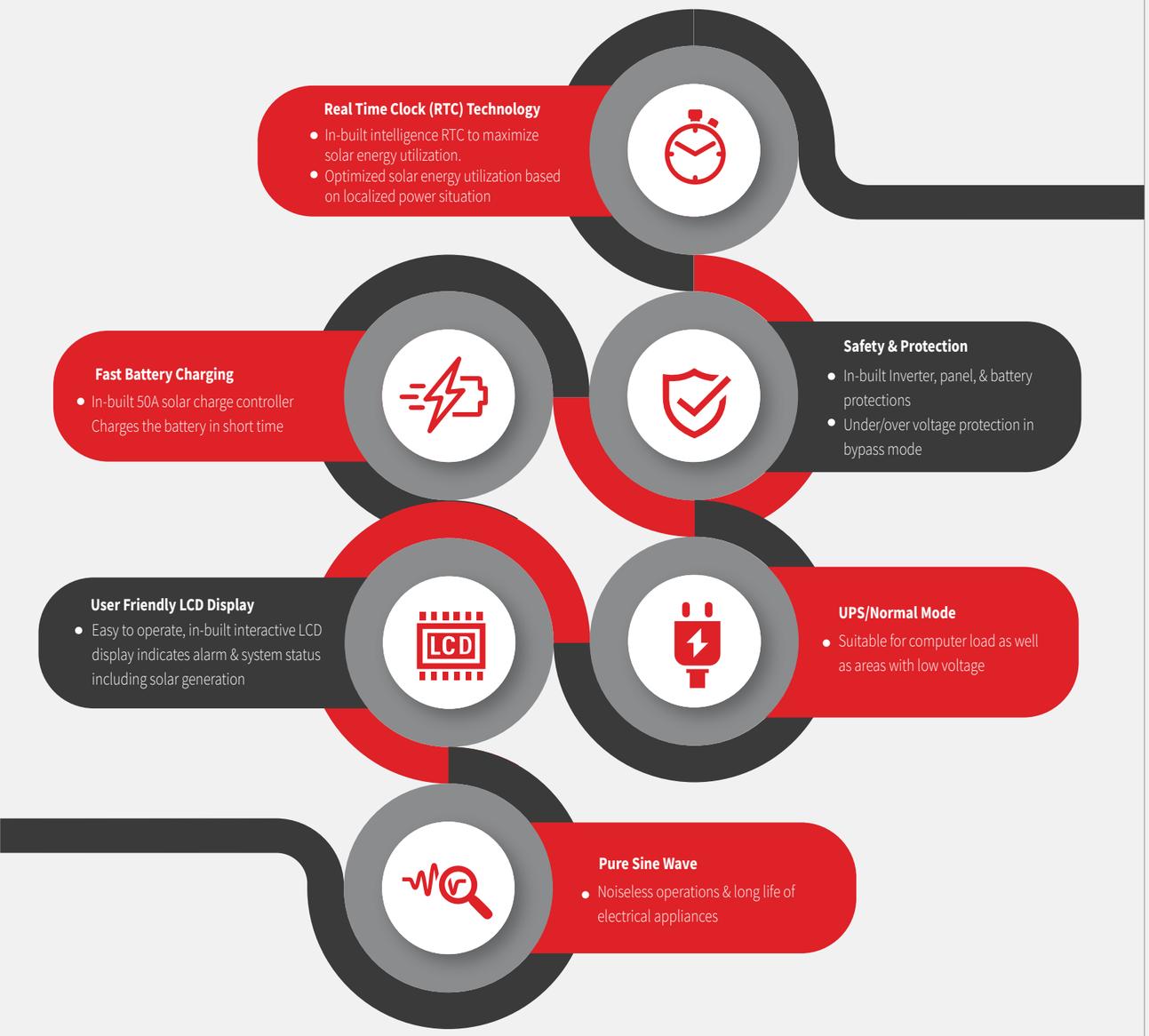
PWM SOLAR INVERTERS

Livguard Solar Inverters provides power from solar battery and grid as per the load profile. It has the highest rated solar charge controller which extracts maximum power from solar modules and reduces electricity bills.

Highest Rated Solar Charge Controller

Auto bypass during fault

3 Years Warranty



SPECIFICATION

Model Name	LS OG950	LS OG1150+	LS OG1750/12V	LS OG1850+	LS OG2250+
System Rating	700 VA	900 VA	1500 VA	1500 VA	2200 VA
Nominal Battery Voltage (Vdc)	12 V			24 V	
Output Waveform	Pure Sine Wave				
Switching Element	MOSFET				

SOLAR PV INPUT

Technology	PWM	
Charge Controller Rating (Amps.)	50 A	
Maximum Solar Panel (Wp)	900 Wp	2000 Wp
Input Voltage Range (Vmp)	14.5-18 V	29 - 42 V
Maximum Input Voltage (Voc)	25 V	50V

GRID INPUT

Input Supply	Single Phase -230V, 50Hz
Operating Voltage Range (Normal Mode)	90 V - 290 V
Operating Voltage Range (UPS Mode)	180 V - 260 V

OUTPUT

No Load Output Voltage	225V + 7V	
Output Frequency Battery Mode	50 ± 1Hz	
No Load Current (UPS Swich Off)	≤ 180mA	≤ 200mA

BATTERY

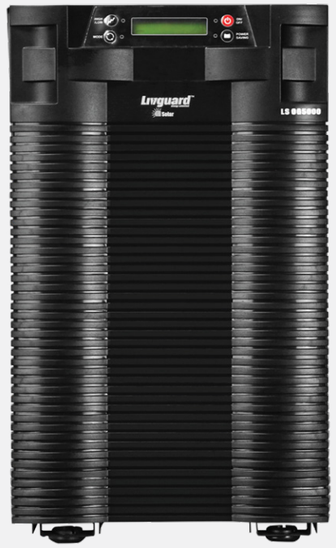
Battery Charging through Mains + (NC)	10 A	13 A	17 A	13 A	14 A
Battery Charging through Mains + (HC)	13 A	17 A	24 A	17 A	20 A
Battery Charging through Solar (Default)	40 A				
Charging Current @100V AC	>8 A				
Low Battery Indication	10.8± 0.2V				
Low Battery Trip	10.6± 0.2V				
Solar Optimization after Battery is Fully Charged	If Solar is Available - then Load is Handled by Battery & Solar				

OVERLOAD , PROTECTION , LCD DISPLAY & USER INTERFACE

Overload Shutdown Indication	Display Overload & Alarm
Overload Pre-Alarm Indication	Display Overload with Load % Alarm
Overload Capacity	110% Load Running at 3 Sec
Protection	Thermal Trip , OverLoad with % , Short Circuit , Battery Low , PV Reverse , Fuse Trip
LCD Display	Mains Voltage / Output Voltage , Battery Voltage , Load(%), Battery Low , Solar KWH Solar Ciurrent on Load , Solar Charging Current , Overload with (%), PV Reverse, Short Circuit.
User Interface	Battery Boost Voltage , Battery Low Cut Voltage, Max, Grid Charging Current, Max. Solar Charging Curent.

GENERAL

Operating Temperature	0°C to 50°C				
Dimensions(LxWxH) in mm	335*325*180	295 X 330 X 170	335*325*180	363 X 398 X 251	365 X 400 X 250
Net Wieght (Kg)	7.52	10	11.36	15	16.5
Technical Parameters are Subject to Change Without any Perior Notice.					



PWM SOLAR PCU

Livguard Solar PCUs are high capacity, high efficiency solar Inverters that runs both on solar & utility (grid) power supply. It has an in-build solar charge controller which extracts maximum power from solar modules to power your appliances & battery charging.

LCD & LED Display

3 Years Warranty

Real Time Clock (RTC) Technology
- In-built intelligence RTC to maximize solar energy utilization.
- Optimized solar energy utilization based on localized power situation

Fast Battery Charging
- In-built 50/70 Amp solar charge controller that charges the battery in short time

Safety & Protection
- In-built human, panel, & battery protections
- No risk of electric shocks

User Friendly LCD Display
- Easy to operate, in-built interactive LCD display indicates alarm & system status including solar generation

UPS Mode
- Suitable for computer load as well as areas with low voltage

Pure Sine Wave
- Noiseless operations & long life of electrical appliances

SPECIFICATION

Model Name	LS OGR3500	LS OGR5048	LS OGR7500	LS OGR10000
System Rating	3.5 KVA	5 KVA	7.5 KVA	10 KVA
Nominal Battery Voltage (Vdc)	48V	48V	120V	120V
Ouput Waveform	Pure Sine Wave			
Switching Element	MOSFET			

SOLAR PV INPUT

Technology	PWM			
Charge Controller Rating (Amps.)	50 A	70 A	50 A	70 A
Maximum Solar Panel (Wp)	3400W	5600W	8500W	11900W
Maximum Input Voltage (Vmp)	82.4	82.4	188	188
Maximum Input Voltage (Voc)	100	100	230	230

GRID INPUT

Input Supply	Single Phase - 230 V; 50 Hz
Nominal Voltage Range	100 - 280V
Nominal Frequency Range	45 - 55Hz

OUTPUT

Nominal Output (Vac)	220V ± 7V			
Nominal Frequency	50Hz ± 1Hz			
Nominal Output Current (A)	12.5Amp.	17.5Amp.	27Amp.	35Amp.
UPS Efficiency	≥ 80%	≥ 85%		

BATTERY

Battery Recharge Current Range from Grid Side (A)	5 - 18A	5 - 16A	5 - 20A
Default Value Battery Recharge Current Range from Grid Side (A)	18A	16A	20A
Battery Recharge Current Range from PV Side (A)	5 - 50A		

PROTECTION, USER INTERFACE & SETTING

Protection	Thermal Trip, Over load with %, Short Circuit, Battery Low, PV Reverse, MCB Trip
LCD Display	Mains on/off/cut, Mains Voltage, Battery Voltage, Battery Charging/Charged, Mode: UPS/Normal Load (%), Solar On/Off, Solar to Load (A), Solar to Battery (A)
Indications	Inverter: On/Off, Charging: high/low, Mode: UPS/Normal, Mode: Hybrid
User Setting	Battery Boost Voltage, Battery Low Cut Voltage, Max. Grid Charging Current, Max. Solar Charging Current

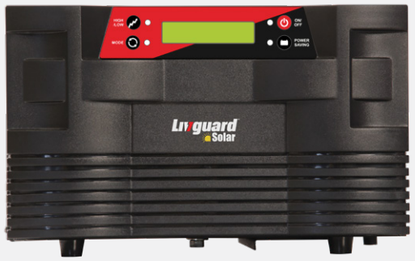
ENVIRONMENT

IP Protection Level	IP-20
Operating Temperature (°C)	0 to + 55°C
Max Relative Humidity @ 25°C	0-95%
Max. Altitude above Sea Level without De-rating (M)	≤1000 m

PHYSICAL

Dimension (W x D x H) in mm	370 x 400 x 320	370 x 510 x 550	370 x 530 x 620	370 x 530 x 620
Net Weight (Kg)	28.97	43.79	64.57	67.28
Gross Weight (Kg)	31.3	46.5	69.6	70.8

Technical Parameters are subject to change without any prior notice



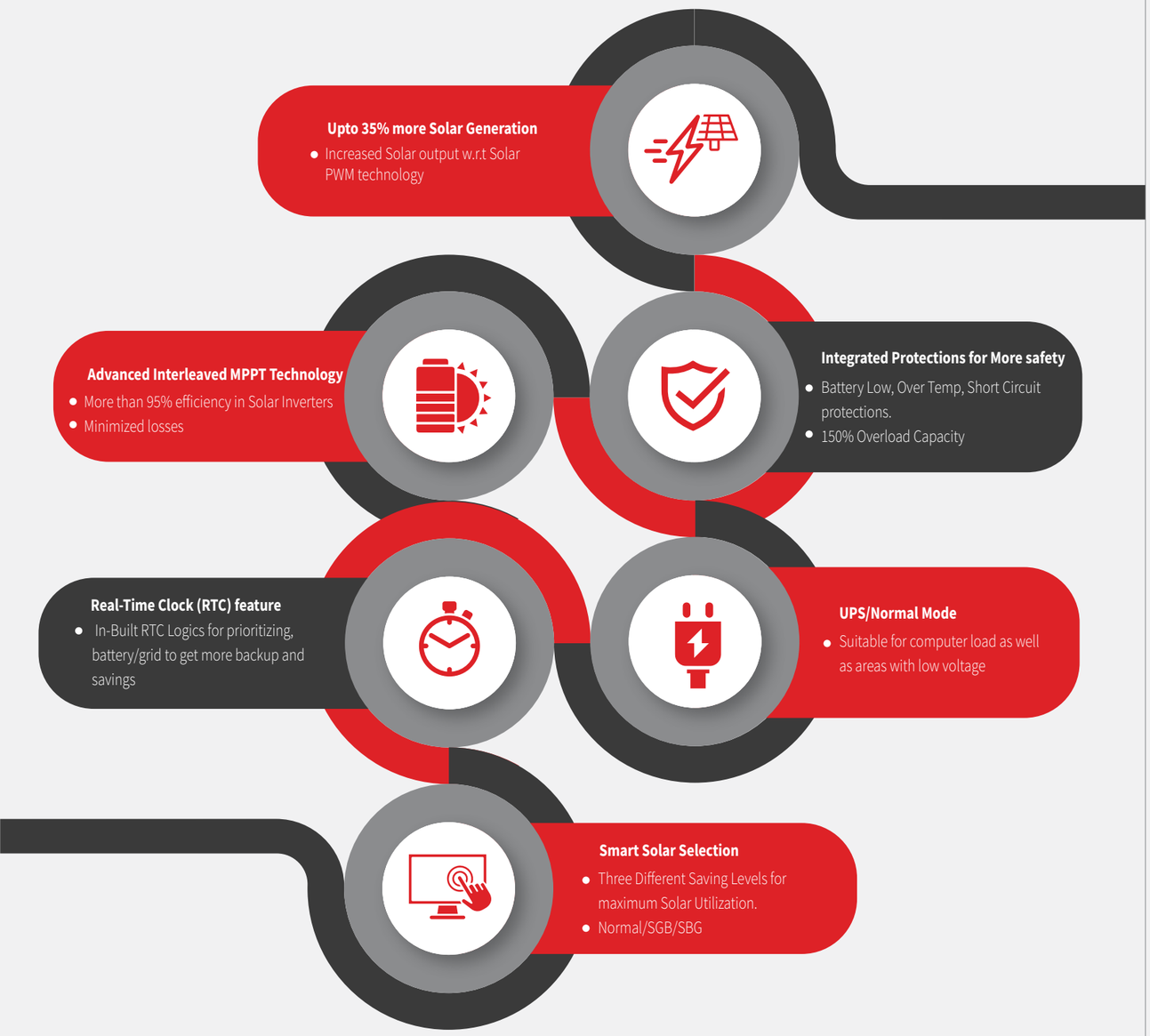
MPPT SOLAR INVERTERS

Highly efficient MPPT Solar Inverters come with Interleaved MPPT technology to extract Solar energy with minimum losses. This solar inverter has RTC (Real Time Clock) feature, that renders optimum solar power and also manages your grid usage to provide maximum savings.

***35% Enhanced solar generation**

Next-Gen MPPT Technology

3 Years Warranty



SPECIFICATION

Model Name:	LS OG1000M	LS OG2200M	LG 2500M	LG 3250M
Product Specification Range of MPPT Solar PCU	1000VA /12V	2200VA /24V	2500VA /24V	3000VA /24V
Battery Voltage (Nominal)	12V	24V	24V	24V

Mains Input Mode

Mains AC Low Cut (UPS Mode)	180 ± 10V			
Mains AC Low Cut Recovery (UPS Mode)	9-12V Hysterisis from > Low Cut Voltage			
Mains AC High Cut (UPS Mode)	270 ± 10V			
Mains AC High Cut Recovery (UPS Mode)	9-12V Hysterisis from > High Cut Voltage			
Mains AC Low Cut (Wide Range Mode)	90 ± 10V		100 ± 10V	
Mains AC Low Cut Recovery (Wide range Mode)	9-12V Hysterisis from > Low Cut Voltage			
Mains AC High Cut (Wide Range Mode)	290 ± 10V			
Mains AC High Cut Recovery (Wide Range Mode)	9-12V Hysterisis from > High Cut Voltage			
Input Frequency Range	45-55 Hz			

Backup Mode

Output Voltage	225± 7 V			
Output Frequency	50 ± 1 Hz			
Output Waveform	PURE SINE WAVE			
No Load Current (Switch OFF)	≤ 180 mA			
Low Battery Warning	10.8V ± 0.2 V			
Low Battery Cut	10.6V ± 0.2 V			
Change Over Time (Normal Mode)	≤ 20msec		≤ 40msec	
Change Over Time (UPS Mode)	≤ 10msec			

Battery

Battery Quantity (12V 100Ah to 220Ah)	1	2	2
Float Charging Voltage (Per Battery)	13.7 ± 0.2VDC (Default)		
Boost Charging Voltage(Per Battery)	14.4 ± 0.2VDC (Deafult)		
Charging Current By Grid (NC)	13.5 ± 1A		15 ± 1A
Charging Current By Grid (HC)	18 ± 1A		20 ± 1A
Charging Current By PV (default)	40A (settable 5A to 50A)		

Solar Charge Controller

Solar Charge Controller Type	MPPT Interleaved Channel		
Max Panel Wattage That Can Be Connected	800W	2500W	3200W
Max. input Current per Channel (Maximum Isc)	(30±1)A	(30±1)A	(40±1) A
Maximum PV Voltage Voc	60V	110V	110V
Minimum PV Voltage Vmp	25V	36V	36V
Maximum PV Voltage Vmp	50V	88V	88V
MPPT Charger Efficiency (peak)	≥92%		≥95%

Protections, User Interface, Settings

Protections	Battery Low, Overload, Over temperature, Output Short Circuit, Mains MCB/Fuse Trip, PV Reverse
LCD Display	AC Mains Voltage, O/p Load %, Battery Input Voltage, Battery Charging/charged Solar KWH, Solar Current on Load, Solar Current on Battery, Mains On, Output Voltage, Time
Operation Modes	1. Saving Level 1 - Normal Mode
	2. Saving Level 2 - SGB Mode
	3. Saving Level 2 - SBG Mode

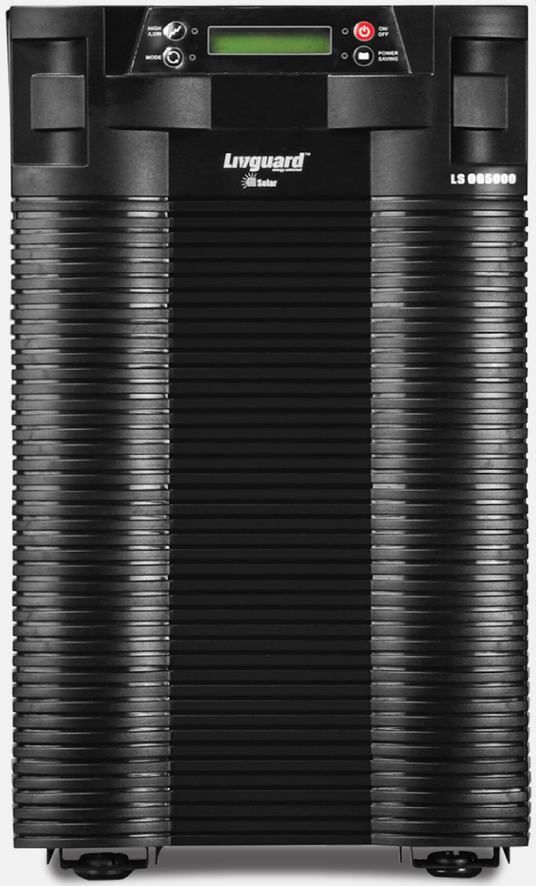
Environment

Protection Class		IP20 (indoor Use)
Operating Temperature		0 to 55°C
Max Relative Humidity at 25°C		0-95%

Dimensions

Dimensions in mm (LXWXH)		314X276X232	314X276X232	314X276X232
Box Dimensions in mm (LXWXH)		380X375X320	380X375X320	380X375X320
Weight in Kg	NetWeight	12.260Kg	17.00Kg	19.33Kg
	GrossWeight	13.530Kg	18.370Kg	20.70Kg

NOTE: Specifications are subject to change without prior notice



MPPT SOLAR PCU

LCD & LED Display

5 Years Warranty

Livguard Solar MPPT SOLAR PCUs are high capacity, enhanced efficiency solar PCU that runs both on solar & utility (grid) power supply.
It comes with Priority Mode (Normal, SBG, SGB) feature for maximizing savings and extended backup.
Advanced MPPT algorithm extracts maximum power from PV modules to both run your appliances and charge your batteries.

FEATURES

Enhanced Solar Power Utilization with Priority Mode
- No PV overload tripping via limiting feature to ensure generation does not fully stop
- Greater PV power allowed per KVA along with a wide MPPT voltage range

Fast Battery Charging
- Charging from Grid + Solar
- Multiple Battery Selection available, Flat/Tubular/VRLA

Safety & Protection
- Smart thermal management
- In-built battery, inverter and panel protection
- MCB protection at all Inputs and Outputs

UPS/Unregulated Mode
- Wide range for poor grids where voltage frequently comes down

Best in Class Overload Capability
- Upto 200% overload for peak surges
- Multiple overload attempts allowed

Pure Sine Wave
- Noiseless & long life operations of electrical appliances.

SPECIFICATION

Model No.	LGTLSOG3548M+	LGTLSOG5548M+	LGTLSOG7596M+	LGTLSOG10120M+	LGTLSOG15240M+
Product Specification Range of MPPT Solar PCU	3KVA/48V	5KVA/48V	7.5KVA/96V	10KVA/120V	15KVA/240V
MAINS INPUT MODE					
Mains AC Low Cut (UPS Mode)	170 ± 10V		170 ± 10V		
Mains AC Low Cut Recovery (UPS Mode)	9-12V Hysterisis from > Low Cut Voltage				
Mains AC High Cut (UPS Mode)	260 ± 10V		260 ± 10V		
Mains AC High Cut Recovery (UPS Mode)	9-12V Hysterisis from < High Cut Voltage				
Mains AC Low Cut (Wide Range Mode)	100 ± 10V		100 ± 10V		
Mains AC Low Cut Recovery (Wide range Mode)	9-12V Hysterisis > Low Cut Voltage				
Mains AC High Cut (Wide Range Mode)	280 ± 10V		280 ± 10V		
Mains AC High Cut Recovery (Wide Range Mode)	9-12V Hysterisis < High Cut Voltage				
Input Frequency Range	50 ± 5% Hz				
Output voltage in Mains mode	Same as Mains Input				
Output frequency in Mains mode	Same as Mains Input				
BATTERY					
Battery Type	TUBULAR				
	VRLA				
	FLAT PLATE				
DC Input Voltage (Nominal)	48V	48V	96V	120V	240V
Battery Quantity (12V 100Ah to 220Ah)	4	4	8	10	20
Float Charging Voltage (Tubular/VRLA/Flat Plate)	13.2/13.5/13.4 (per Battery) ± .5V				
Boost Charging Voltage(Tubular/VRLA/Flat Plate)	14.5/13.8/13.7 (per Battery) ± .5V				
Battery Deep Discharge Recovery	YES				
Charging Current By Grid	20.0 ± 1.0A	30.0 ± 1.0A	25.0 ± 1.0A	35.0 ± 1.0A	30.0 ± 1.0A
Charging Current By PV	Provided Above				
BACKUP MODE					
Output Voltage	230 ± 2% V				
Output Frequency	50 ± 0.5 Hz				
Output Waveform	PURE SINE WAVE				
No Load Current (Switch OFF)	Sleep Mode is not Provided Currently				
Discharging Current @ Full Load	10.5 A± 1 Amp.	17.5 A ± 1 Amp.	26 A± 1 Amp.	35 A± 1 Amp.	52 A± 1 Amp.
Low Battery Warning	11.1V (per Battery) ± 0.2V				
Low Battery Cut	10.8V (per Battery) ± 0.2V				
Change Over Time From Mains To Inverter (Unregulated Mode)	≤40 msec				
Change Over Time From Inverter To Mains (Unregulated Mode)	≤10 msec				
Change Over Time From Mains To Inverter (UPS Mode)	≤10 msec				
Change Over Time From Without Inverter To Mains (UPS Mode)	≤10 msec				
Cooling	FORCED COOLING BY FAN				
PROTECTIONS					
Overload in Backup Mode	YES				
Short Circuit in Backup Mode	YES				
Short Circuit in Mains Mode	Mains MCB Trip				
Backfeed	YES				
Over Temperature	YES				
Reverse Battery	YES				
Phase to Phase Protection in Mains Mode	YES				
SOLAR CHARGE CONTROLLER					
Solar Charge Controller Type	MPPT				
Max Panel Wattage That Can Be Connected	3350W	5350W	8650W	11550W	16500W
No. of Input Channel	1	1	1	1	1
Max. input Current (Isc)	40A	40A	30A	40A	40A
Maximum PV Voltage Voc	110V	195V	400V	400V	550V
Minimum PV Voltage Vmp	68V	68V	136V	170V	340V
Maximum PV Voltage Vmp	88V	150V	340V	340V	440V
Max. Panels connection (S: Series, P: Parallel) (550W)	S:2 | P:3	S:3 | P:3	S:7 | P:2	S:7 | P:3	S:13 | P:2
Max. Panels connection (S: Series, P: Parallel) (590W)	S:2 | P:3	S:3 | P:3	S:7 | P:2	S:6 | P:3	S:13 | P:2

SPECIFICATION

Solar Charge Controller		
Maximum Battery Charging Current from Solar	5A-50A (user settable)	
MPPT Charger Efficiency (Peak)	94%	95%
Reverse PV Protection	YES	
Reverse Current Flow to PV	NO	
Switching Element(MPPT Charger)	IGBT	
DOD (Depth of Discharge)	As per battery voltage setting (1.8V/cell)	
DISPLAY AND ALARMS		
LCD Display Parameters	1. Battery Voltage & Current	
	2. PV Voltage & Current	
	3. PV Power, Total Generation & Today's Genration	
	4. Mains Voltage & Frequency	
	5. Load Voltage, Current & Frequency (Inverter Mode Only)	
	6. Load Power	
	7. Battrey Charging/Discharging Status	
	8. Time & Date	
	9. User Settings & Factory Settings	
LCD Fault/Protection Status Display	i) Overload	
	ii) Short Circuit	
	iii) Battery & PV Reverse Polarity	
	iv) Battrey Over/Under Voltage	
	v) Battery Current Limit	
	vi) Mains Over/Under Voltage	
	vii) System Over Temprature	
	viii) Grid/Load/PV Surge Protection(MOV)	
Buzzer	YES	
SAFETY		
HV Test Input to Earth	YES	
HV Test Output to Earth	YES	
IR Test Input to Earth	YES	
IR Test Output to Earth	YES	
ENVIRONMENT		
Operating Temperature	0°C to 50°C	
Storage Temperature	10°C to 70°C	
Operating Relative Humidity	5-95% (Non-condensed)	

DIMENSIONS						
Dimensions in mm (LXWXH)		325X295X415	448.5X275X611	650X400X753.5	650X400X753.5	650X450X753.5
Box Dimensions in mm (LXWXH)		680X345X510	680X345X510	835X495X800	835X495X800	835X565X800
Weight in Kg	Net Weight	31.0Kg	52.95Kg	97.5Kg	104.35Kg	138.40Kg
	Gross Weight	33.5Kg	55.55Kg	109.85Kg	116.70Kg	153.45Kg
NOTE: Specifications are subject to change without prior notice						

GRID INTERACTIVE INVERTER (GI)

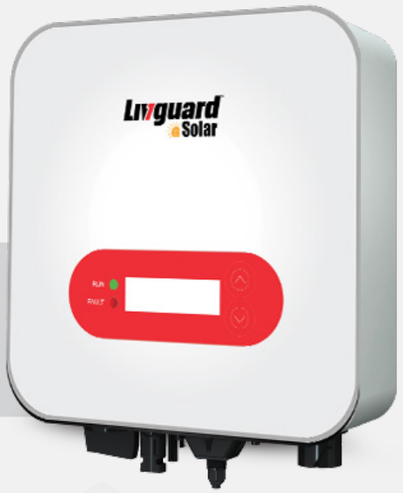
Product Description

G3 series of Grid Interactive (GI) Invertes are compatible with new age Topcon Solar Panels upto 590Wp. With an attractive design and powerful features, this inverter comes with best in class warranty.

Application

Homes and establishments that need to reduce their electricity bills.

- Wide Operating Voltage Range
- Smart remote Monitoring Included with LivMonitor 360
- Low self consumption at night 〈1W
- Compact design, light in weight
- 15A Isc to accommodate high rating panels.



10* YEAR PRODUCT WARRANTY

XPERT KO BULAO, APNI BIJLI BANAO.

*T&C Apply

SPECIFICATION

LG Nomenclature	LGSUN3K1MG3GI	LS105GI-G3	LS106GI-G3
Input (DC)			
Recommended Max. PV Input Power	4100Wp	7500Wp	9000Wp
Max. Input Voltage	550V	600V	600V
Number of MPPT/String per MPPT	1/1	2/1	2/1
Start-up Input Voltage	70V	60V	90V
Rated Input Voltage	360V		330V
MPPT Operating Voltage Range	50-550V	50-570V	50-570V
Full Power MPPT Voltage Range	275-500V	250-520V	250-520V
Max. Input MPPT current	15Ax1	12.5Ax2	15A x 15A
Max. DC Input Short-circuit Current per MPPT	20Ax1	15Ax2	22.5A
Output(AC)			
Rated Power	3000W	5000W	6000W
Max. AC Power	3000VA	5000VA	6000VA
Max. Output Current	14.5A	24.1A	29A
Nominal Grid Voltage	L/N/PE, 220VAC 230VAC 240VAC		
Grid Voltage Range	180-276VAC		
Nominal Frequency	50/60 Hz		
Grid Frequency Range	45-55Hz/54-66Hz		
THDi	〈3%		
Power Factor	1 Default (+/- 0.8 Adjustable)		
Efficiency			
MPPT Efficiency	〉99.9%		
Self-consumption at Night	〈 1W		
Max. Efficiency	97.7%	98.0%	98.4%
Protection			
DC Reverse Polarity Protection	Yes		
Safety Protection	Anti-Islanding protection DC reverse polarity protection Over temp protection Leakage current protection Over voltage protection Over current protection Earth fault protection		
SPD	MOV: Type III Standard		
Communication			
Standard Communication Mode	RS485, WiFi/GPRS (optional)		
General Data			
Topology	Transformerless		
Ambient Temperature Range	-30°C to 60°C		
Permissible Relative Humidity Range	0-100%		
Noise	〈25dB		
DC Switch	Optional		
Cooling	Natural Convection		
Max. Operating Altitude	2000m	4000m	4000m
Dimension	321x260.5x131.5mm	345*341*167mm	349x344x164mm
Support bracket	Wall-mounted		
Weight	≤7Kg	10Kg	10Kg
Display	LCD+LED	LCD	LCD
Degree of Protection	IP65		
Warranty	10 Years		
Standards Data			
EMC	EN 61000-6-1, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12	
Safety standards	IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 62109-1/2	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)	
Grid standards	AS 4777, DE V 124-1 0 V 0 0 , VDE V 0126-1-1, VDE-AR-N 4105, G83/2, C10/11, RD 1699	VDE-AR-N 4105, VDE V 0126-1-1, V 0124-100, AS/NZS 4777, CEI 0-21, G98/G99, C10/11, EN 50549, RD 1699	

NOTE: Specifications included in this datasheet are subject to change without notice.

SPECIFICATION

Parameters	LS305GI- G3	LS308GI - G3	LS310GI - G3	LS315GI-G3	LS320GI-G3
Input (DC)					
Max. Recommended PV Input Power	7500W	12000W	15000W	22500W	30000W
Start-up Input Voltage	160V				
Number of MPPTs	2				
MPPT Voltage Range	140-1000V				
Input Range with Full Power Opera- tion with 2 MPPTs Parallel	240-850V	380-850V	420-850V		480-850V
Max. Input Current	13A/13A			26A/26A	
Input Short-circuit Current for each MPPT	18A/18A			36A/36A	
Output (AC)					
Nominal Output Power	5000W	8000W	10000W	15000W	20000W
Max. Output Power	5500VA	8800VA	11000VA	16500VA	22000VA
Max. Output Current	8A	12.8A	15.9A	23.9A	31.9A
Nominal Grid Frequency	50/60Hz				
THD/THDi	〈 3 %				
Efficiency, Safety and Protection					
Max. Efficiency	98.4%	98.5%	98.5%	98.6%	
Euro Efficiency	97.5%	98.0%	98.0%	98.2%	
MPPT Adaptation Efficiency	〉99.9%				
Self-consumption at Night	〈 1 W				
Communication	RS485, WiFi/GPRS (optional)				
DC Switch	Yes				
DC Reverse Polarity Protection	Yes				
Input / output SPD	PV: type II standard, AC: type II standard				
Other Protections	Anti-islanding protection, Leakage current protection, Ground fault monitoring, PV-array string fault monitor- ing				
General Data					
Ambient Temperature	(-)30°C to +60°C				
Cooling	Natural				Fan
Display	LCD&Bluetooth +APP				
Dimension	513*425*169mm				
Weight	17Kg	18Kg	18Kg	20Kg	22Kg
Noise	〈 40 dB				
Ingress Protection	IP 65				
Warranty	10 Years*(8 years standard+2 years extended warranty)				
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4				
Grid Standard	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G98/G99, EN50530, NB/T32004				
Safety Standard	IEC62109-1/2, IEC62116, IEC61727, IEC61683, IEC60068(1,2,14,30)				

NOTE: Specifications included in this datasheet are subject to change without notice.

SPECIFICATION

Rating	25KW	30KW	50KW	60KW	80KW	100KW
Input (DC)						
Max. input voltage	1100V					
Rated input voltage	620V					625V
Start-up voltage	200V					
MPPT operating voltage range	180V-1000V					
Number of MPP trackers	3	3	4	6	6	10
Number of DC inputs	2 for each MPPT					20
Max. input MPPT current	3*40A		4*40A	6*32A	6*40A	10*40A
Max. input short circuit current	3*50A		4*50A	6*50A	6*60A	10*50A
Output (AC)						
Rated output power	25000W	30000W	50000W	60000W	80000W	100000W
Max. apparent power	28000VA	34000VA	55000VA	66000VA	88000VA	100kVA@45°C / 90kVA@50°C
Max. output current	42.4A	51.5A	83.3A	100A	133.3A	152A@380V / 145A@400V / 139.2A@415V
Rated output voltage	3/N/PE, 230/400Vac					3/N/PE, 380V / 400V / 415V
Output voltage range	310Vac-480Vac					
Rated output frequency	50/60Hz					
Output frequency range	45Hz-55Hz/55Hz-65Hz					
Active power adjustable range	0-100%					
THDi	〈3%					〈1%(@100%P)
Power factor	1 (adjustable +/-0.8)					
Efficiency						
Max. efficiency	98.6%	98.8%	98.7%			98.6%
MPPT Efficiency	〉99.9%					
Protection						
DC reverse polarity protection	Yes					
Anti-islanding protection	Yes					
Leakage current protection	Yes					
Ground fault monitoring	Yes					
PV-array string fault monitoring	Yes					
DC switch	Yes					
SPD	PV: type II, AC: type II					
General Data						
Ambient temperature range	-30°C to +60°C					
Self-consumption at night	〈3W			〈2W		-
Topology	Transformerless					
Degree of protection	IP65			IP66		
Allowable relative humidity range	0-100%					
Max. operating altitude	4000m					
Cooling	Smart air cooling					
Dimension (W×H×D)	585×480×220mm			687×561×275mm		970×695×325mm
Weight	36kg	37kg		50kg		75kg
Display	LCD & Bluetooth + APP					
Communication	RS485/Wi-Fi					
Safety	BIS certified as per IS/IEC standards					

SOLAR HYBRID INVERTERS

(HIGH FREQUENCY)

Battery Compatibility
Compatible with both
Lead Acid and Lithium Battery

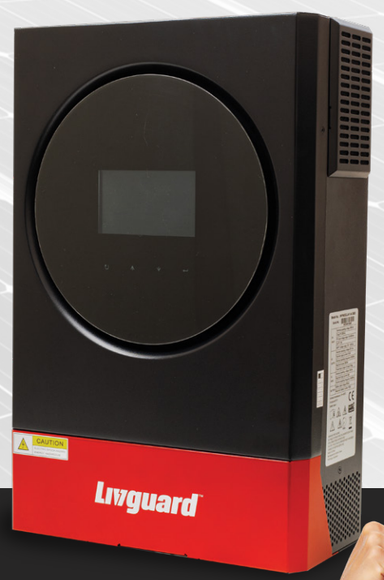
Parallel Operation
You can Connect upto 9
inverters in parallel

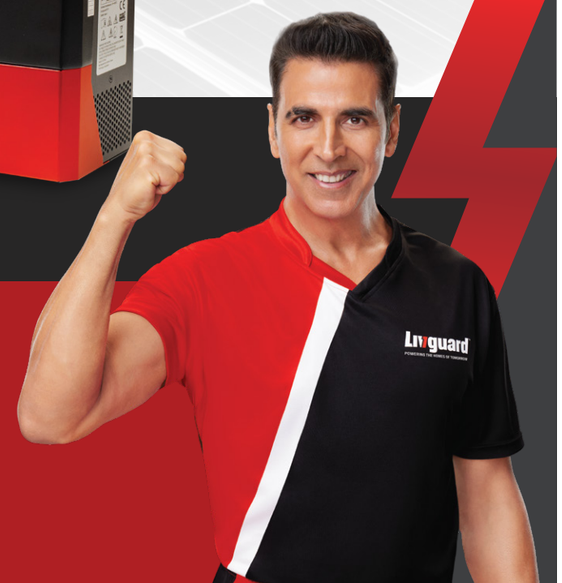
Built-in WiFi Connectivity
Connects to home WiFi & enables
solar power generation tracking
on mobile

Surplus Solar Power Export
Get power backup & export excess
solar power to grid

Multicolor LCD Display
View status in LCD/LED display
with different RGB lights

Higher Efficiency
With Transformerless design,
makes it more efficient & reliable





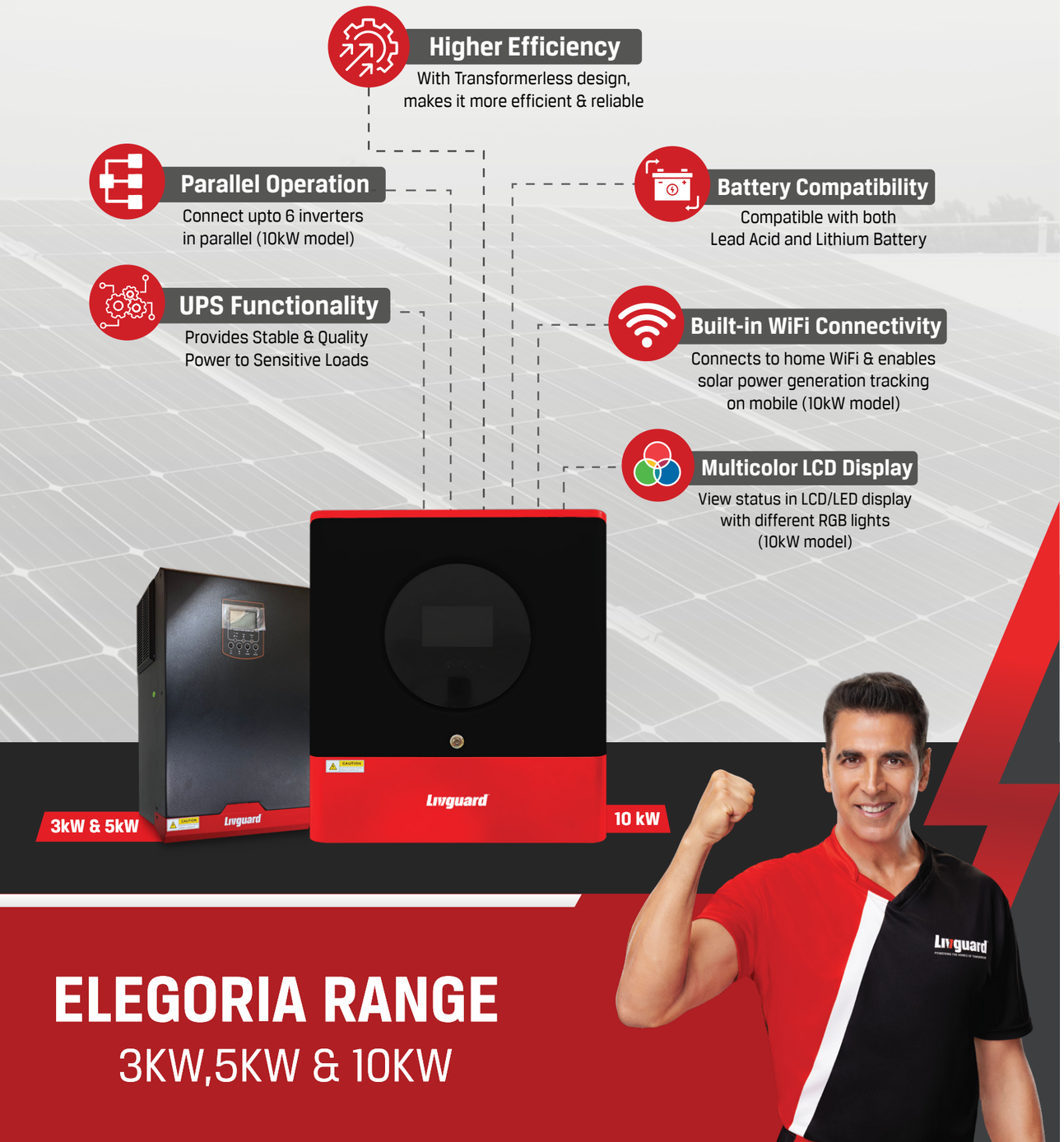
NOVARA RANGE
3.6 KW & 5.6 KW

High Frequency Solar Hybrid Inverter

MODEL	NOVARA- LG3648GIH	NOVARA-LG5648 GIH
PHASE	1-phase in / 1-phase out	
MAXIMUM PV INPUT POWER	5000W	6000W
RATED OUTPUT POWER	3600W	5600W
MAXIMUM CHARGING POWER	5000W	6000W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC	360 VDC / 450 VDC
Start-up Voltage / Initial Feeding Voltage	110VDC	
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18 A	1 / 27 A
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	15.6A	24.3A
Power Factor	> 0.9	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	96%	96%
OFF-GRID OPERATION		
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
PV INPUT (DC)		
Maximum DC Voltage	500 VDC	450 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18 A	1 / 27 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Waveform	Pure sinewave	
Efficiency (DC to AC)	93%	93%
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC	360 VDC / 450 VDC
Start-up Voltage / Initial Feeding Voltage	110VDC / 120 VDC	110VDC / 120 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 18 A	1 / 27 A
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	15.6A	24.3A
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	40A	40A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Efficiency (DC to AC)	93%	93%
BATTERY & CHARGER		
Nominal DC Voltage	48 VDC	48 VDC
Maximum Solar Charging Current	100A	120A
Maximum AC Charging Current	100A	120A
Maximum Charging Current	100A	120A

SOLAR OFF GRID INVERTER

(HIGH FREQUENCY)



ELEGORIA RANGE

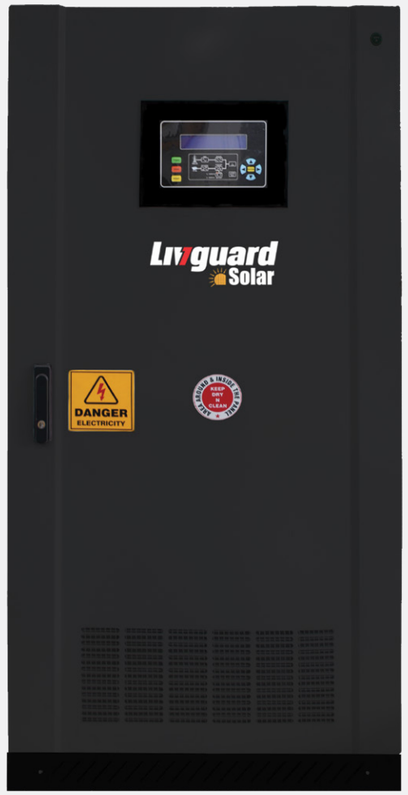
3KW,5KW & 10KW

High Frequency Off Grid Solar Inverter

MODEL	ELEGORIA-LG3K48M	ELEGORIA-LG5K48M
Rated Power	3000VA/3000W	5000VA/5000W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	
Surge Power	6000VA	10000VA
Efficiency (Peak)	93%	
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	48 VDC	
Floating Charge Voltage	54 VDC	
Overcharge Protection	63 VDC	
SOLAR CHARGER & AC CHARGER		
Solar Charger Type	MPPT	
Maximum PV Array Open Circuit Voltage	450 VDC	500 VDC
Maximum PV Array Power	3000W	5000W
Maximum PV Input Current	13A	18A
MPP Range @ OperatingVoltage	60 ~ 400 VDC	120 ~ 450VDC
Maximum Solar Charge Current		
Maximum AC Charge Current	60A	100A
Maximum Charge Current	100A	
PHYSICAL		
Dimension, D x W x H (mm)	90 x 288 x 357	120 x 300 x 440
Net Weight (kgs)	7.0	10
Communication Interface	RS232/RS485, optional WiFi	
ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	

High Frequency Off Grid Solar Inverter

MODEL	ELEGORIA-LG10K48M
Rated Power	10000VA/10000W
Parallel Capability	YES, 6 units
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%
Surge Power	20000VA
Peak Efficiency	93%
Transfer Time	15 ms (For Personal Computers) ; 20 ms (For Home Appliances)
Waveform	Pure sine wave
No Load Power Consumption	< 75W
DC Voltage	12 VDC ± 5%, 100W
BATTERY	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Maximum PV Array Power	10000W (5000W x 2)
MPPT Range @ OperatingVoltage	90 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC
Maxmum Solar Charge Current	150A
Maximum AC Charge Current	150A
Maximum Charge Current	150A
PHYSICAL	
Dimension, D x W x H (mm)	158.4 x 503.6 x 530.8
Net Weight (kgs)	20
Communication Interface	USB/RS232/RS485/WiFi/Dry-contact
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C



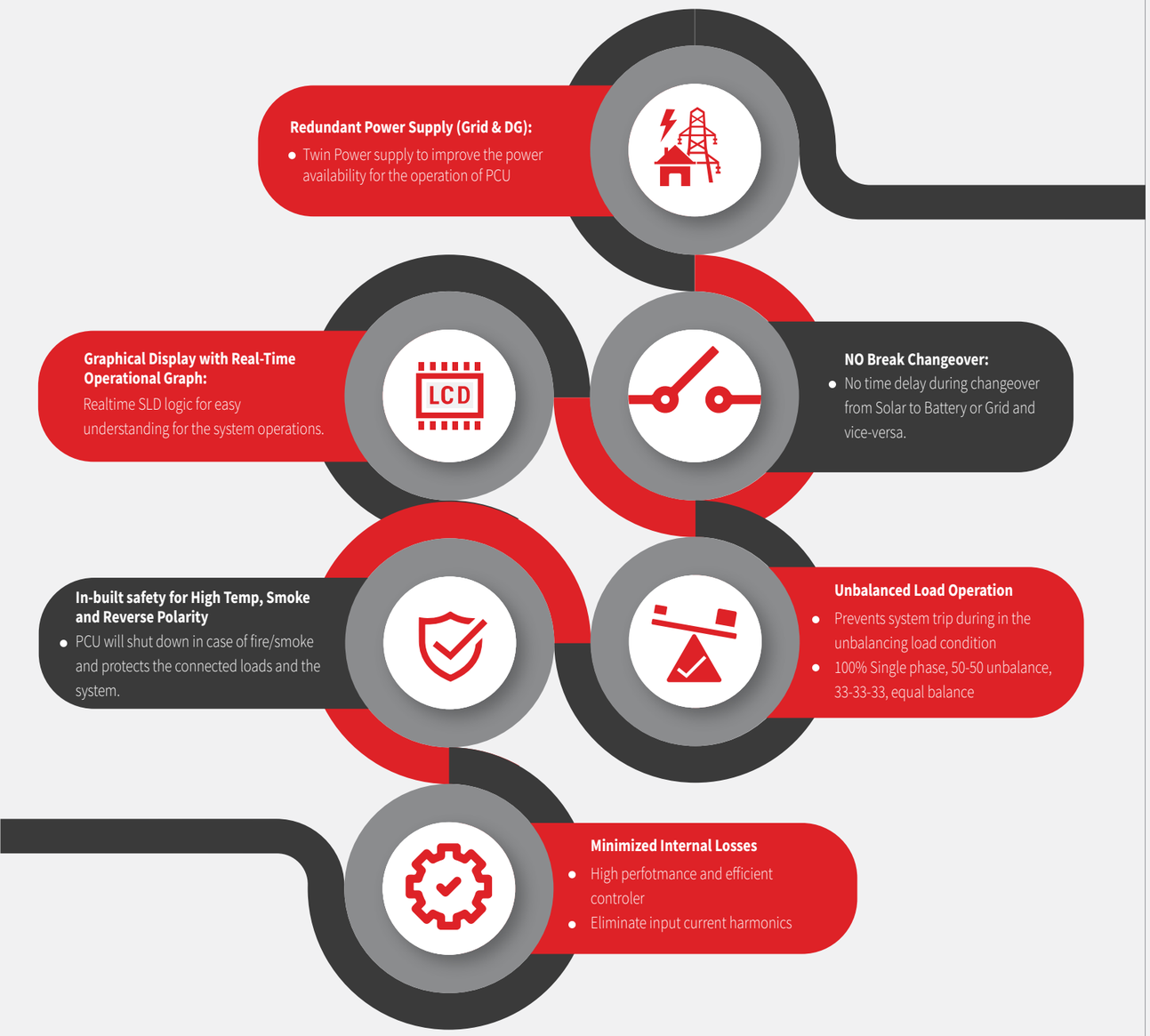
GRID INTERACTIVE HYBRID INVERTER - 3PHASE

Battery Less Operation

2 Years Warranty

Grid Interactive Hybrid Solar Inverter - Three phase in-Three Phase out inverter gives maximum performance and reliability to run your heavy duty appliances. This inverter enables you to have the flexibility to be used as a On-Grid, Off-Grid or Hybrid Inverter as per your convenience

FEATURES



SPECIFICATION

INVERTER CAPACITY (kVA)	10	15	20	25	30	40	50	60	80	100	120
Grid											
Input Wiring	3PH Five Wire (3 PH + N + E)										
Input Neutral Requirement	Yes										
Nominal Voltage	330V To 450V FOR 3PH										
Grid Frequency Sync Range	50 Hz (± 6%)										
Unity Power Factor For Grid Charging	Near To Unity										
Operating Condition	Continuous										
Input Fault Level	>=10 KA										
Self-consumption	Up To 4%										
Charger Peak Efficiency	Upto 95%										
DG Compatibility	YES (Double Of Inverter Capacity)										
Grid Compatibility	Yes Same As Inverter Capacity										
Input Voltage Distortion Allowed	Less Than 3%										
Grid Charger Capacity	50 % Of kVA Rating										
Solar											
Charger Type	MPPT										
Max PV Connection In KWp	10	15	20	25	30	40	50	60	80	100	120
Max PV Voltage (VOC)	250V	250/500V	500/680V					680V		680/900V	
MPPT Voltage Range	165-250V	165-250V 290-450V	290-450V: 240VDC | 420-620V: 360VDC					420-620V		420-620V 650-850V	
MPPT Modes Available	3 (Selectable)										
No Of MPPT Channel	1							2	2	2	2
Max I/P Amps Per Channel (Amps)	83	125 | 62	83|55	104|69	125|83	166|111	208|138	166	222	277|208	333|250
Panel Reverse Protection	Yes										
Solar Charger Efficiency	Up To 95%										
Battery											
Nominal Battery Voltage (VDC)		120 | 240	240V | 360					360		360 | 480	
Battery Buffer Setting	DC Voltage Selectable Through Key Pad										
Grid Charging Current	Settable Through Key Pad										
Temperature Compensated Charging	Yes										
Battery Charging Voltage	Selectable From LCD Display										
Type & No. Of Cells	Lead Acid / VRLA / Ni-cd/ (Lithium Ion)#										
BMS Compatible	Yes										
Output											
Max Current Per Phase	11.5	17.3	23	29	33	44	55	67	89	111	133
Output Voltage (Inverter Mode)	400V AC ± 2 %				415V AC ± 2 %						
Output Frequency (Free Running)	50 Hz ± 1%										
Output Waveform	Pure Sine Wave										
Peak Inverter Efficiency (Full Load)	Upto 90 %										
Total Harmonic Distortion	Upto 3% At Linear Load										
Overload Capacity	125% For 60sec, 150% For 5 Sec										
Changeover Time (Full Load)	No Break Change Over Time										
DC To AC Galvanic Isolation	In Built Isolation Transformer At Inverter Output										
Anti Islanding Function	In Compliance With IEC 62116										
Auto Bypass Feature	Yes										
Unbalance Load Handling Capacity	Yes										
Duty	Continuous										
Configuration											
Modes Available	Grid Saving, Battery Backup, Export										
Power Export To Grid	Enable / Disable Option Available										
Power Import From Grid	Enable / Disable Option Available										

SPECIFICATION

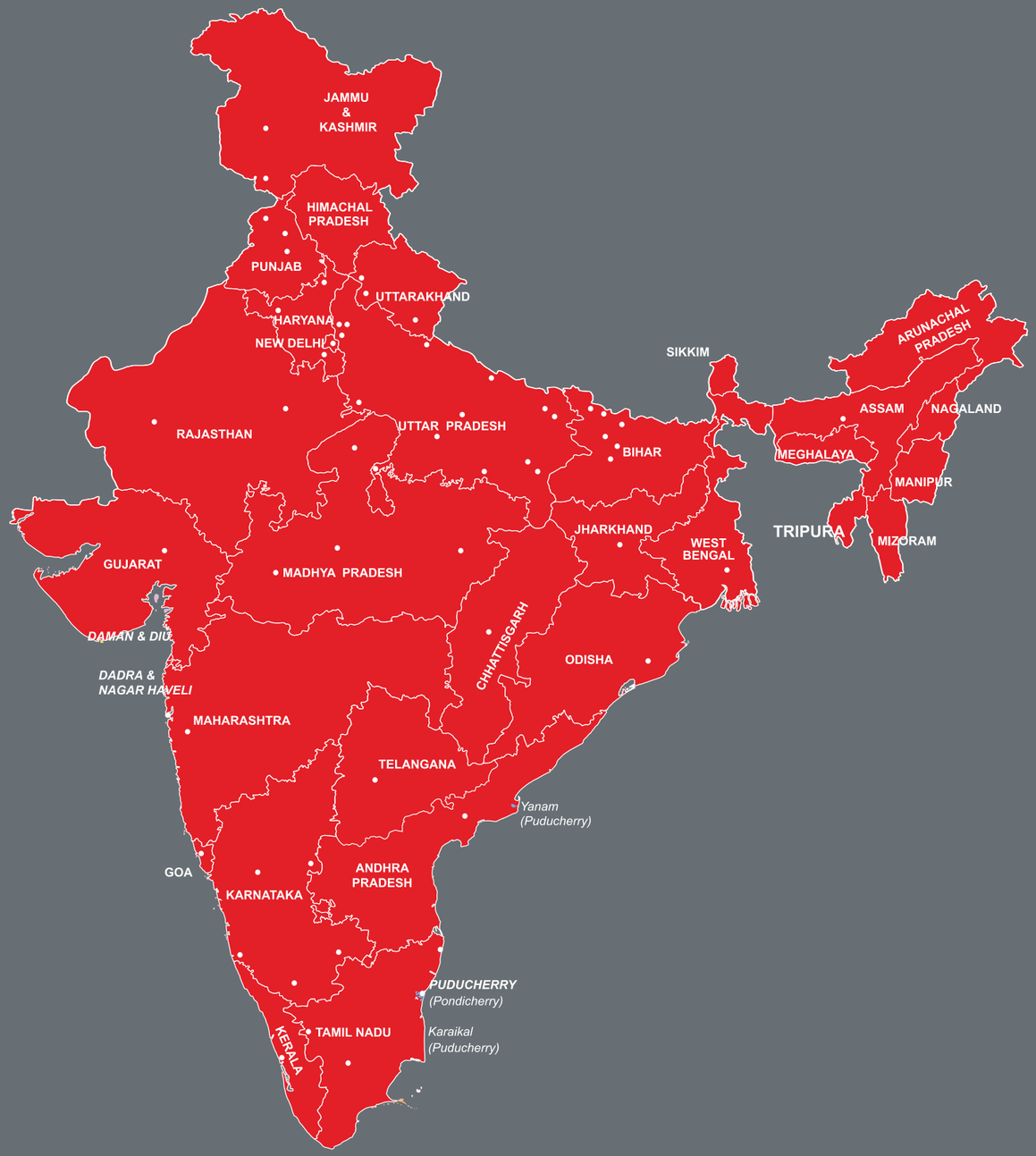
INVERTER CAPACITY (kVA)	10	15	20	25	30	40	50	60	80	100	120
Environmental											
Acoustic Noise Level From 1 M	≤ 65 dB										
Operating Temperature	0 To 40 Deg C(Dust Free Cooled And Dry Environment)										
Storage Temperature	-10 Deg C To 55 Deg C										
Relative Humidity	Up To 95 % (Non Condensing)										
Altitude	〈1000 meter above sea level										
Physical											
Enclosure Protection Grade	IP 20 Compatible To IEC 60529:2001-02- As Per MNRE Requirement										
Enclosure Thickness	As Per Industrial Standard										
Cooling	Forced Air										
Colour	Upto 25kVA: RAL 7016					Above 30kVA: RAL 9016					
Cable Entry	Bottom										
Parameters Displayed On LCD											
Mains Group	1. Voltage, 2.Current, 3. Frequency, 4. KW, 5. kVA, 6. Import KWh , 7. Export KWh, 8. PF										
Inverter Group	1. Voltage, 2. Current, 3. Frequency, 4. kVA										
Output Group	1. Voltage, 2. Frequency										
Output Group	1. Solar Voltage , 2. Solar Current, 3. Power(KW), 4. Solar Energy (KWh)										
Battery Group	1. Voltage, 2.Current 3. SOC										
Protections											
Electrical Protections	Circuit Breaker And Fuse										
Electronic Protections											
Alarm Group	Alarms Are Available For Fault Condition.										
Input Group	1.Input Under Voltage, 2.Input Over Voltage, 3. Charger Over Voltage, 4. Under / Over Frequency										
Inverter Group	1. Output Under Voltage,2.Output Over Voltage 3. Overload, 4. Output Short Circuit, 5. Inverter Over Temperature										
Solar Group	1. Surge Protection , 2. Reverse PV Panel Protection										
Battery Group	1. Battery Low , 2. Battery Over Charge 3. Battery Charging Current Limit										
Connectivity											
Communication	Rs 485										
Protocol	Modbus RTU										
LCD With Backlight & Tactile Key Pad Interface	Yes										
Testing Standard	IEC -61683:1999, IEC- 60068-2-1, IEC-60068-2-2, IEC-60068-2-14, IEC-60068-2-30- As Per MNRE Requirement										
Safety Factor	1 For Electronic Devices, 1 For Electrical										
Earthing Connection (Ref. Is 3043)	Earth Terminal Block		25- 40 kVA : 3 X 25 mm Gl /Aluminium (Earth Bus Bar Running Along The Panel)			45-150 kVA : 6 X 50 mm Gl/Aluminium (Earth Bus Bar Running Along The Panel)					
Illumination Lamp	N.A.					11 W CFL					
Gland Plate	Na					3 MM MS C.R.C.A.					
Utility Socket	Na					5 A / 230 VAC					
	Dimensions (In MM)										
kVA Rating	10	20	25	30	40	50	60	80	100	120	
Width (W)	450	450	450	600	600	800	800	1100	1100	1100	
Depth (D)	800	800	950	1000	1000	950	950	800	800	800	
Height (H)	800	800	800	1300	1300	1700	1700	1900	1900	1900	
Weight (Kg) APPROX.	150	300	350	350	650	650	700	850	900	1000	
	Add On ACCESSORIES (Not Standard Part Fo Inverter)										

1)GSM Based Remote Monitoring, 2.) 2) Modbus RS485 3) RADIATION SENSOR (Pyranometer)
4) SMOKE DETECTOR. 5) IP 42 Enclosure And Above. 6) Manual Bypass

Notes:

LIVSERV SERVICE NETWORK

NOW SERVING COUNTLESS STATES ACROSS THE COUNTRY



950+
Trained Service Engineers

On-Site* Service Facility
- **Solar Panel, Inverters, PCU : Customer End**
- **Battery: CSC location**

58+ **Service centre locations Pan India**

My LIVSERV SUPPORT

+91-7428191000
+91-7428191001
+91-7428191002

GET IT ON Google Play