



PWM POWER CONDITIONING UNIT

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



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



PWM POWER CONDITIONING UNIT

Model Name	LS OGR3500	LS OGR5000	LS OGR7500	LS OGR10000
System Rating	3.5 KVA	5 KVA	7.5 KVA	10 KVA
Nominal Battery Voltage (Vdc)	48V	48/96V	120V	120V
Output Waveform	Pure Sine Wave			
Switching Element	MOSFET			

SOLAR PV INPUT

Technology	PWM			
Charge Controller Rating (Amps.)	50 A	70/50 A	50 A	70 A
Maximum Solar Panel (Wp)	3400W	4760/6800W	8500W	11900W
Input Voltage Range (Vmp)	Min - 60V, Max - 68V	48V: Min-60V, Max-68V, 96V: Min-120V, Max-136V	Min - 150V, Max - 170V	Min - 150V, Max - 170V
Maximum Input Voltage (Voc)	88 V	88/175V	220 V	220 V

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