



COMBO - SOLAR MPPT PCU WITH LITHIUM BATTERY BANK



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Models

Solar Combo Li 1500/12V with Battery Bank 1024Kwh

Solar Combo Li 2500/24V with Battery Bank 2.4Kwh

Solar Combo Li 5500/48V with Battery Bank 4.8Kwh



INTRODUCTION

Unleash the sun's potential! Solar lithium UPS systems are the smarter, sleeker way to keep your critical equipment humming during blackouts. Ditch the heavy lifting, the toxic fumes, and the frequent replacements of lead-acid batteries. Upgrade to the next generation of backup power: solar lithium. It's lightweight, lasts years longer, and fuels itself from the sky.



Superior Lithium Battery Technology

The Pure Sine Wave UPS with Lithium Battery harnesses the power of advanced lithium battery technology to provide a range of benefits over traditional lead-acid batteries.



Su-vastika's Certifications

Certified excellence: Our ISO [standard] reflects our commitment to quality you can trust.



Increased Efficiency:

- **Higher energy density:** Lithium batteries can store more energy per unit weight and size than lead-acid batteries. This translates to a smaller and lighter overall system, which can be beneficial for space-constrained installations.
- **Lower self-discharge:** Lithium batteries lose less charge when not in use compared to lead-acid batteries. This means you'll get more use out of your stored solar energy.
- **Faster charge and discharge rates:** Lithium batteries can charge and discharge much faster than lead-acid batteries, allowing you to quickly tap into your stored energy when needed and capture more of the available solar power throughout the day.

Improved Performance and Longevity:

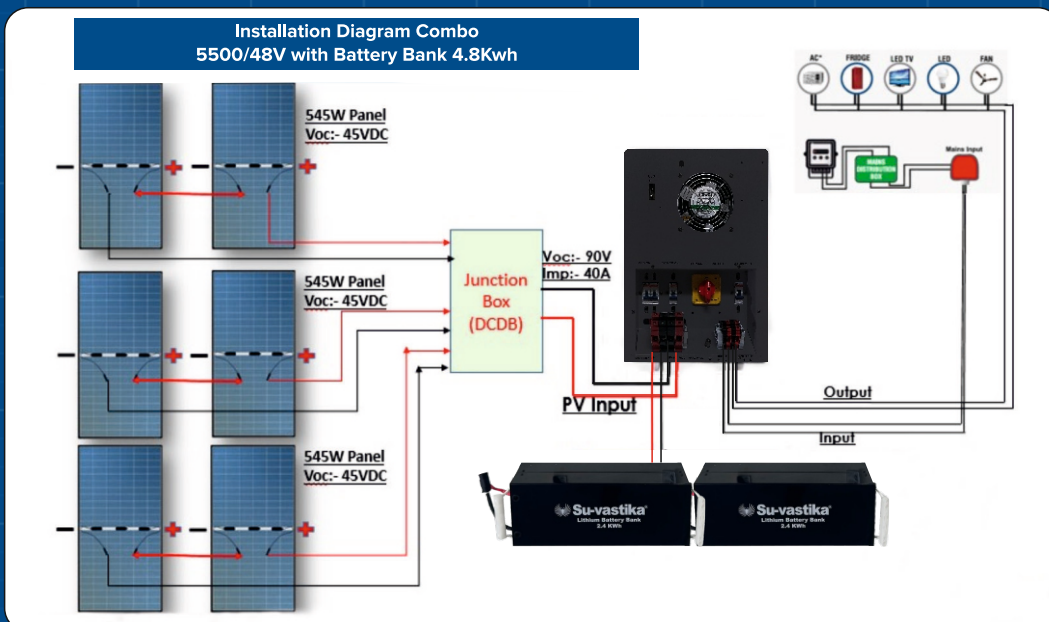
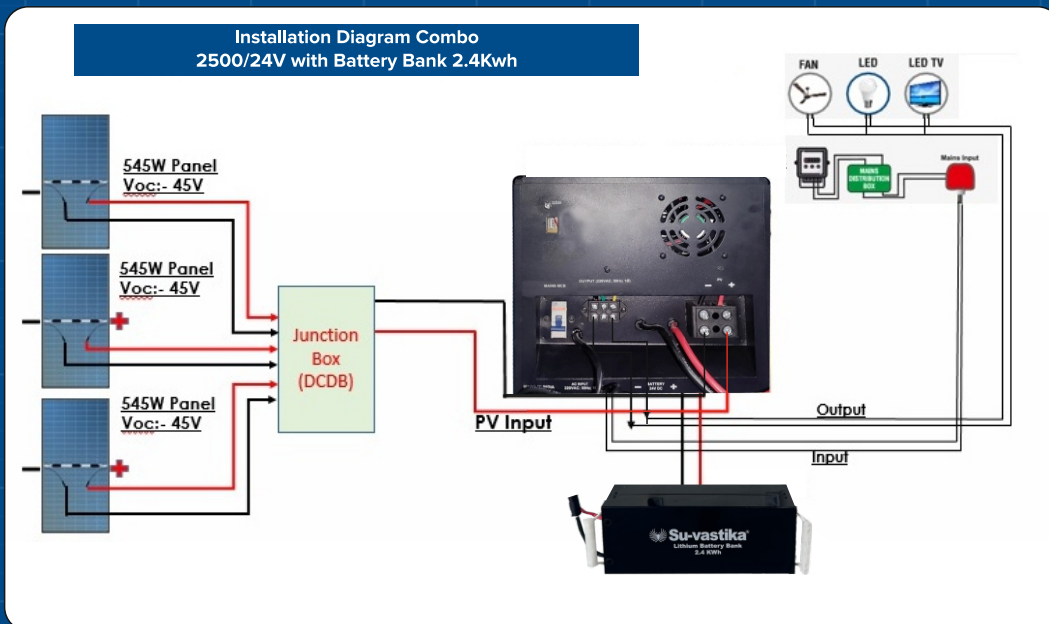
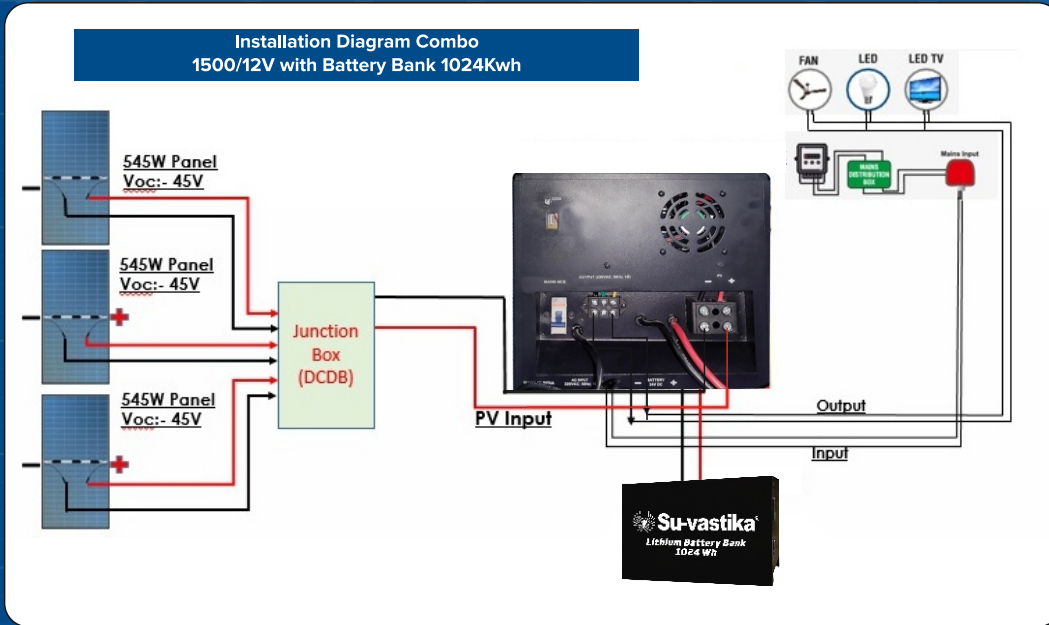
- **Longer lifespan:** Lithium batteries typically have a lifespan of 7-10 years, compared to 2-3 years for lead-acid batteries. This means you'll need to replace your batteries less often, saving you money and reducing environmental waste.
- **Wider operating temperature range:** Lithium batteries can perform well in a wider range of temperatures than lead-acid batteries, making them suitable for a variety of climates.
- **Deeper discharge cycles:** Lithium batteries can be discharged to a much lower depth than lead-acid batteries without damaging them, allowing you to utilize more of their stored energy.

Other Benefits:

- **Reduced maintenance:** Lithium batteries require minimal maintenance compared to lead-acid batteries, which need regular watering and electrolyte checks.
- **Improved safety:** Lithium batteries are generally considered safer than lead-acid batteries, as they do not contain hazardous materials and are less prone to overheating and explosions.
- **Environmental benefits:** Lithium batteries are recyclable and contain fewer harmful materials than lead-acid batteries.
- **The Pollution of Lead in the Air:** Tubular Lead Acid batteries create lead and oxygen gasses, which are dangerous for the health of people staying around. Lithium batteries are sealed, pollution-free, and safer than tubular lead-acid batteries.



1. Installation Diagram of various Combos:



2. Available with Lithium Battery Bank:



Combo 1500/12V with Battery Bank 1024 Kwh



Combo 2500/24V with Battery Bank 2.4Kwh

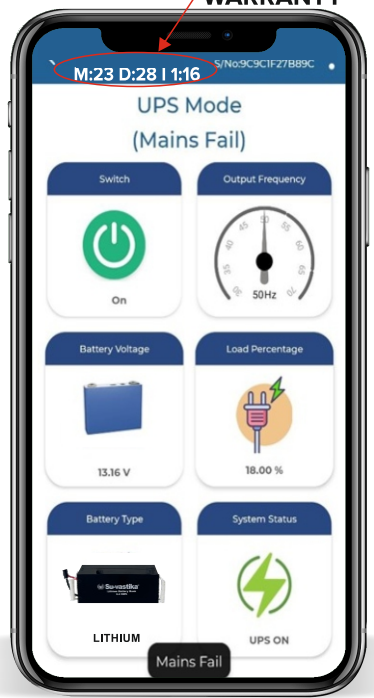


Combo 5500/48V with Battery Bank 4.8Kwh

3. Smart and Convenient Digital Warranty:

Su-vastika's Digital Warranty: Say goodbye to lost paperwork and unfair coverage. This smart application tracks real usage, starting when your PCU powers on and pausing when it is off. Enjoy worry-free protection with Bluetooth/ Wi-Fi access to your warranty status anytime, anywhere.

Paperless Warranty just pure peace of mind.



4. Take control of your power with a single glance.

Our intuitive app delivers a real-time dashboard of your UPS, unveiling its hidden potential. Monitor battery health, track solar energy harvesting, and see if the grid's playing nice – all in one convenient interface. No more guessing, no more surprises, just complete power awareness at your fingertips.

Solar Priority Selection - Automatic

500W Power is required for battery charging which is Available from Solar, So all required power is taken from Solar and disconnected from the Mains.



Mains are available but not connected by UPS because the required power for battery charging is sufficient from Solar.

Solar Priority Selection - Automatic

Solar Wattage 500W

500W Solar Power is available from which 216W load is running and 284W power is used for battery charging.

If the input Voltage is lower than the input voltage range of the Solar PCU, then the Solar PCU will shift on Backup Mode & a pop-up message will come for notification in the Application.

5. Anderson Connector vs Tubular Battery Terminals

Su-vastika's Pure Sine Wave UPS and battery come with the Anderson Connector, which ensures that the installation engineer does not make mistakes while installing the Lithium Battery.



Lithium Battery with Anderson Connector

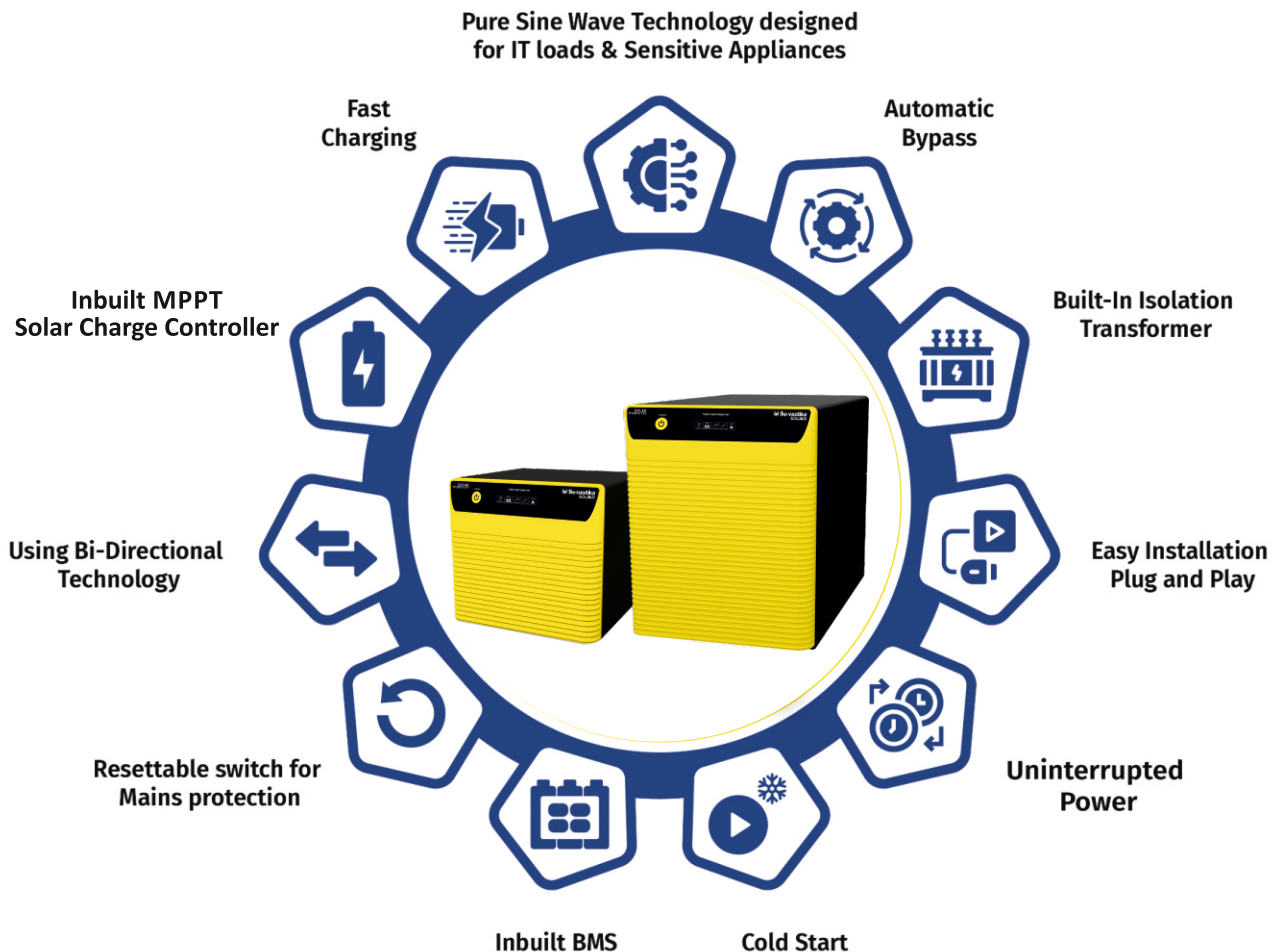


Tubular Battery with open Metal Terminals

6. Comprehensive Protection Features

The Pure Sine Wave UPS with Lithium Battery incorporates protection features to safeguard your valuable equipment and investment.

- **High-Voltage and Low-Voltage Protection:** Prevents damage from voltage fluctuations.
- **Overload Protection:** Shields against excessive power demands. Short-Circuit
- **Protection:** Safeguards the battery and connected devices from short circuits.
- **Bidirectional technology:** It has a microcontroller or microprocessor based technology for charging and discharging an inverter.
- **Isolation transformer:** It is an essential parameter before buying an inverter as it helps the life of the inverter and is a vital parameter to consider before buying an inverter.
- **IoT-based:** Technology means Bluetooth and a built-in Wi-fi facility to monitor all the inverter/UPS parameters.



7. Technical Specification

Model Name		Li 1500	Li 2500	Li 5500	
Display Type		LED			
LED DISPLAY FEATURES					
Mains On	Backup	Charge	Overload	Solar available	Low Battery
Battery Low Protection	Overload Protection	Short Circuit Protection	Mains Trip Protection	Solar Not available	High Temperature Protection
INPUT PARAMETERS					
Phases		1 Phase 3-Wire			
I/P AC Voltage Range	UPS Mode	180VAC-260VAC ± 10VAC	180VAC-260VAC ± 10VAC	180VAC-260VAC ± 10VAC	
	W-UPS Mode	85VAC -95VAC ± 10VAC	85VAC -95VAC ± 10VAC	140VAC -150VAC ± 10VAC	
OUTPUT PARAMETERS					
Voltage Regulation		220V ± 20%	220V ± 20%	220V ± 10%	
Phase		1 Phase 3-Wire			
Frequency regulation		50Hz±0.1Hz			
Output Waveform		Pure Sine Wave			
Overload		>100% Load			
Short circuit Protection		>200% Load			
Full load (Bulb Load)		980W	2000W	4000W	
BATTERY PARAMETERS					
Type of Batteries		Lithium Batteries			
Battery KWH		1024Wh	2.4KWh	4.8KWh	
Battery Charge Method		CC-CV			
USER INTERFACE					
Remote Monitoring		Wi-Fi/Bluetooth			
SOLAR CHARGE CONTROLLER PARAMETERS					
SCC Type		MPPT			
SCC Rating		12V/40A	24V/40A	48V/40A	
SCC Voc		50VDC	50VDC	90VDC	



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