



LIGEN-INV3500-48VDC

The “**LIGEN POWER**” inverter is a robust commercial-grade solution designed for small to medium-sized businesses, offices, and shops. With its advanced features and sturdy build, it ensures uninterrupted power supply during outages, enabling smooth operations.

Salient Features

- DSP Sinewave UPS / Inverter
- Sine Wave Technology
- Noiseless Operation
- Efficient Power Performance
- CRGO Laminated Core
- Pure Copper Transformer
- Low No-Load DC Current
- High-Quality PCB
- Consistent Output



Specification

Description	Details
Model No	LIGEN INV3500 – 48VDC
Product	DSP Sinewave UPS/Inverter
Functionality	Works with Grid, Solar & Integrated LFP Battery
DSP Based	Less Components, small size less electricity bill more efficiency
Soft Start Features	Protects appliances at start-up
Usage	Reliable power backup for residential & commercial applications
Technology	Utilizes Sine Wave Technology for safe and efficient power delivery.
Battery Support	Internal 51.2V LIB Battery integrated with 16S1P BMS

Intelligent Processing

DSP technology enables advanced control algorithms for precise output regulation, adaptive learning for optimized battery management, and fault detection for enhanced reliability. Efficient power management and quick fault response ensure uninterrupted operation in offline applications.

Smart Display

Offers unique indications for mains status, Output status, system faults, Load status, Temperature status, Charging and battery status.

Operation Modes

Involves switching from mains power to battery power during outages, ensuring uninterrupted supply to connected devices. Ideal for sensitive appliances like computers.

Protection Features

Includes MCB/Fuse for input mains protection and a bypass switch for direct main supply in case of inverter faults.

Grid Protection

AC input low and high voltage cut off protections in both, inverter and UPS modes

Noiseless Operation

Low harmonic distortion ensures quiet operation. This inverter prioritizes reliability, efficiency, and safety, making it an ideal choice for commercial establishments requiring dependable backup power solutions.

Technical Specification

Specification	Details
Model	LIGEN INV 3500VA – 48 VDC
Rated Power	3500VA/2800W (1-Phase Input 1-Phase Output)
Input Voltage (Battery Mode)	51.2V DC
BATTERY CHEMISTRY	Lithium Iron Phosphate (LFP)
BATTERY PACK	INTERNAL INTEGRATED WITH 16S1P BMS
BATTERY CAPACITY	100Ah
Grid Input Voltage (Vmp)	(100 – 290) ±10VAC
Output Voltage (Grid Mode)	Same as Input
Output Voltage (Backup Mode)	220V AC ± 2%
Output Waveform (Grid Mode)	Same as Input
Output Waveform (Backup Mode)	Pure Sine Wave
Output Frequency (Grid Mode)	Same as Input
Output Frequency (Backup Mode)	50Hz ± 0.05Hz
Max Grid Charging Current	15A±1A (CCCV)
Charging Time (Max)	7 Hours 30 Minutes
Load (Max)	2500 Watt
Backup Time	1 Hours 50 Minutes
Efficiency	> 90%
Changeover Time	<8ms
Protection	Yes (Automatic Cut-off)

Protection Supported	Overload, Deep Discharge, Over Charge, Short Circuit, Over Temperature.
Over Load Capacity	>110%: 3 times auto reset, 4th time shut down >200% Output goes down
DISPLAY ON UPS/INVERTER	LOW BATT., BATT. VOLTAGE, CHG. CURRENT, CHG. MODE, AC IN, AC OUT, LOAD, OVERLOAD, TEMPERATURE, INV ON/OFF STATUS
Operating Temperature Range	-20°C to 65°C
Cooling Mechanism	Intelligent Fan Cooling
Cooling Fan Start/Stop	60°C or Load above 50%/50°C & Load below 50%
Audible Alarm	Yes
Bypass Feature	Manual

Additional Information:

- High-frequency switching technology for compact size and light weight.
- Pure sine wave output for a wide range of applications and harsh environments.
- Highly efficient DC-to-AC conversion minimizing energy loss.
- Standby Charging Mode enables battery charging even when the unit is switched off.
- Intelligent cooling fan control and LCD displays comprehensive operation status.
- Suitable for powering computers, POS systems, routers, lights, and other sensitive electronic devices.
- Advanced microcontroller for optimal performance and reliability.
- Easy installation and operation.

Applications:

- Small to medium-sized businesses
- Offices
- Shops
- Banks
- Restaurants
- Clinics
- Pharmacies
- Telecommunication facilities

Physical Specification

Description	Status
Display	4 Line LCD Display
Dimensions – L x W x H (cm)	39.7 x 36.0 x 63.7

Warranty Information

Component	Warranty
Inverter	1 Years
Battery	6 Years



Coverage

Manufacturing defects & performance failures under normal usage

Amossys Portable Power LLP
Shed No-B4-05(FF), B4-06(FF), B4-07(FF) & B4-08(FF)
BIADA Industrial Area, Sikandarpur, Bihta Patna, Bihar – 801103
www.ligenpower.com

LIGEN POWER

