LUPUS



500 - 700 - 1000 - 1600VA

User Manual

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- Please read this user manual carefully before operation.
- Please keep this manual handy for future reference.
- The printer socket is applicable for laser printer.(No output if mains is down).
- It is prohibited to connect loads such as electric fan, electric drill or electric dryer

Description

LUPUS UPS series is a new generation of high-performance safe and reliable uninterrupted power supply with the characteristics of voltage stabilizing functions, excellent machine performance, comprehensive automatic protection functions, small and exquisite appearance design, visually display, and easy-to-use feature. It can provide the computer and its peripheral equipment with pure and stable uninterrupted AC power supply.

Main Features

●Extra-Wide Input Voltage Range

The input voltage range is very wide from 165V to 275V; provided with voltage stabilizing functions; wide application range.

Digital Control Technology

Having MCU as its control core, it can automatically monitor the input surge, decline, break, abnormal frequency, output load status and battery status etc., thus providing the load with comprehensive protections. Complete in functions.

• Complete Protection Function

With protections for input over-voltage/under-voltage, surge, output over voltage, over loading, short circuit, over charged battery and under voltage, has greatly improved the reliability.

•Battery cold start and under voltage self-starting functions

With the battery start function when there is no electric supply, and the run-out battery self-starting function when there is renewed electric supply. These two functions have effectively enhanced the battery functions.

•Intelligent Power Management

Optional monitoring function. The associated software can save data and shut down computer automatically, as well as proceed real-time monitoring of the UPS.

Auto start

UPS is equipped with a switch configuration mode: ON UPS starts automatically when you connect the power supply in the OFF position requires manual switching.

Operating principle

LUPUS series UPS (hereafter shortened as UPS) will not supply power from its battery when the mains is working normally, which means the mains goes through UPS into the computer with stabilised voltage.

When the mains is down, UPS will switch to Inverter mode. When the mains voltage is lower than 165Vac or higher than 275Vac, UPS will also switch to Inverter mode, so as to effectively protect the computer from the interruption of electricity network.

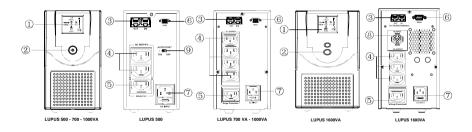
When the mains resumes to normal status, UPS will start automatically, and the battery charger will start charging the battery as well.

The battery will be charged fully within 8 to 10 hours of charging.

Installation & use

Panel and backboard of UPS

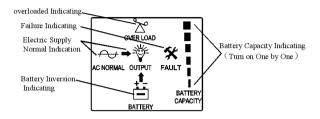
Figure (1) Panel and backboard schematic diagram of UPS LED models



- 1. Mains status Indicating Led
- 2. Power Switch
- 3. RJ11+RJ45 Protection Port (Protecting Fax, Modem, Network Card etc.)
- 4. Computer Socket (Inverter Protected Output Socket)
- 5. Printer Socket (Applicable for Laser Printer, Power<600W)
- 6. Dry Joint Communication Interface
- 7. Input Socket with Fuse (With another Spare Fuse)

- 8. Battery slot
- 9. Switch startup configuration

Figure (2) LCD Schematic Diagram of UPS LCD models



Installation & use steps

- After unpacking the UPS, check whether there is any mechanic injury due to transportation. If the UPS appearance has been serious injured, further examination is needed.
- Place the UPS in an well-ventilated dry place; do not block the ventilation of two UPS sides.
- The rated input and output of UPS are both 230Vac 50 Hz.
 The input is a three-core power cord (P+N+G), the output is a three-core standard IEC socket, and the UPS case is connected with ground wire. Please make sure the ground wire is well connected.
- 4. Plug the UPS input power cord into the mains socket, and plug the other end into the UPS input socket. Please make sure the neutral wire and live wire are in accordance with national standards, and the ground wire should be well connected.

The following is the front schematic diagram of input mains socket:



5. Connect the computer and monitor to the "Computer Sockets" of the UPS (Output Inverter Protected : AC 230Vac), and connect the printer to the "Printer Socket" (Output Stabilised only : AC 230Vac).

- 6. For the UPS with RJ11+RJ45 ports, the "IN" socket is for communication signal input, and the "OUT" is for modem or network card, so as to have the protection for the communication equipment ports.
- 7. To **Turn On** gently press the UPS power switch for 2 seconds, and turn on the computer after the UPS starts working.
- 8. To **Turn Off** gently press the UPS power switch for 2 seconds to turn off the UPS.

Instructions on Panel Indicating LED & LCD and Buzzer

UPS Work Status	LCD DISPLAY	BUZZER
-Normal Electric Supply	AC NORMAL" ~ "On	
-Electric Supply is connected to the load	OUTPUT"ϔ" On	Silent
-Battery is charging	The battery indicator is growing	
-Normal Electric Supply	AC NORMAL" " On	
-Electric Supply is connected to the load	OUTPUT" \ " On	Silent
-Battery fully charged	Displays the full battery bar	
	BATTERY" ☐ " On	Claus Baaning
-Electric Supply is down or abnormal	OUTPUT "🔻" On	Slow Beeping
-UPS is supplying power from the	The reduction of lighted battery capacity	Every 3 Seconds
Inverter to the load	indication led means that the battery is	And beeps every 10
	discharging	seconds after 10 beeps
-UPS battery is fully discharged -Please save data and shut down computer immediately	Only one battery capacity Led is blinking	Fast Beeping Every 1 Second
-UPS output overloaded, please reduce the load, and plug the large-load equipment such as printer etc to the printer socket	OVERLOAD" ٌ On	Fast Beeping Every 1 Second

Storage & transportation

LUPUS UPS is a high-grade and precise power supply, so is well packed with the designated carton and shock-absorbing foam for storage and transportation, and MUST be kept from humidity, dust, shake or chemical erosion.

Maintenance & repair

Ordinary Problems

If the UPS is operated with normal method, the panel will display the current working status. The following are ordinary UPS failure problematics:

Problem 1: The UPS will not switch to electric supply status after turning on.

Solution: Check whether the power cord is well connected with the electricity network socket; whether the input AC fuse has burned out. (There is one spare fuse in the input fuse socket, please use fuse of same specifications).

Problem 2: Unplug the input power cord after it is turned on, but the UPS cannot switch to Inverter supply status.

Solution: The battery voltage is too low, output is overloaded, or output short circuit; please charge the battery or change it, check whether the output is overloaded and reduce the load, or whether the output loop is short-circuited.

Maintenance

If the UPS is not being used for a long time ,then it should be charged $8 \sim 10$ hours every three month. If possible, please discharge the battery with the computer or 100W light bulb for $1 \sim 3$ minutes. The purpose of discharging is to activate the battery. The battery is only allowed for long-time storage after it is fully charged; or the battery capacity will reduce due to performance erosion after long-time stall. The long-time under voltage (or even zero voltage) due to battery self-discharging will "kill" the battery.

Regularly check the power supply and input and output lines of all equipments, so as to guarantee the reliability of peripheral lines.

Timely maintain or change the battery according to the following indications:

Surroundings	Battery Life	Being Examined	Being Maintained Every
Temperature		Every Six Months	Month
20°	3-5 years	Within 18 months	Discharge it for 1-3
30°	1.5-2 years	Within 10 months	minutes every month if

Replacing the Battery

There is a specially designed floor plate for the easy replacement of battery. And the battery should be changed preferably after the UPS has been turned off, and the AC power cord has been unplugged:

- Turn off the UPS, and unplug all AC input and output power cords;
- 2. Unscrew the 7 screws on the cover with a cross screwdriver;
- 3. Carefully put the UPS upside down, and unscrew the 3 screws on the battery cover;
- Carefully take out the battery, and put in new battery (12V, 7AH maintenance free battery);
- 5. Lock the battery cover and top cover.

Replacing the battery in the other models require, after opening the cover, removing the clamps from the battery and careful of their exits.

Changing the autostart functionality / manual

In order to change the way you start the UPS, disconnect power from the mains supply and turn off all button on the front panel. Toggle switch on the back (ON or OFF) and wait about 1 minute. After restarting the UPS will start up according to the mode setting.

Safety precautions

In order to ensure the safe use of this UPS, please read the the following instructions, so as to avoid mistake or danger in the use:

- This product is designed for home computer/commercial personal computer (PC), and it is not recommended to be used for life-supporting system or other specific important equipments.
- 2. It is dangerous to dismantle the UPS while it is on, as it may lead to an electric shock.
- 3. The UPS should be placed at least 25 cm from the monitor, so as to prevent interference.
- 4. It is absolutely prohibited to place cups or other liquid containers on the top this machine, so as to avoid internal short circuit that may lead to dangers such as electric shock etc.
- 5. Do not store or use this machine in the following surrounds:
 - Sites with flammable gas, erosive material or large amount of dust
 - Sites with severe shakes
 - Outdoors
- 6. If the machine has problem, please cut the power supply and contact local distributor.

Technical specifications

UPS model:		LUPUS 500 - 700 - 1000 - 1600VA	
	Voltage Range	150 –290 VAC	
Input features	Frequency	50U- : 400/	
	Range(Hz)	50Hz ± 10%	
	Power	300 - 420 - 600 - 960W	
	Autonomy	>10 min. (1 PC)	
Output features	Voltage Range	230 VAC ±10% (battery work)	
	Frequency	Synchronizing with input AC while it is	
	Range(Hz)	normal ,and 50±0.5% on battery mode	
	Reduced voltage	Start inverter when the input voltage. <165VAC	
	Increased voltage	Start inverter when the input voltage. > 275VAC	
	Deep discharge batteries	UPS off when the battery voltage drops below	
Protection		the set level,	
Protection		- Turn on the battery indicator	
	Overload or shorting	Immediately for overloads > 150%	
		Fast for a compact battery	
	Switching time	< 6ms	
	LCD display	Network operation, battery operation, overload,	
Danel Indicators		battery status, battery discharged, failure	
Panel Indicators	Sound alarm	Operation with battery, battery discharged,	
		overload	
Weight(kg)		6,3 – 15 – 15 – 20 kg	
Size: (W×D× H) mm		320x90x165 (500VA),	
		380x120x220 (700/1000VA),	
		460x150x220 (1600VA)	
Temperature		-5 ℃ +40℃	
Relative humidity		0-90% non condensing	

Terms of warranty

We provide a warranty for a period of 24 months from the date of sale of the UPS, but not longer than 36 months from date of manufacture. Disclosed in this period, defects will be corrected free of charge within no more than 14 working days from the date of delivery to an authorized service center.

Warranty does not cover:

- Damage caused by the use of the product not in conformance for its intended use and the instruction manual
- Damage caused by improper transportation or improper handling
- Mechanical damage, moisture, liquid spill induced defects and their
- Damage caused by arbitrary, made by the user or other unauthorized repairs, alterations or design changes
- Activities provided in the manual, to which the user must own and at their own expense, such as: installation, commissioning, verification activities, replacement mains fuse.

Proper packaging / protection equipment to the site should be sent to the sender. It is recommended that the unit was shipped in the original containers equipped with protective pads fitted to the device. The use of alternative packaging, provided they adapt to the size and weight of devices shipped, providing adequate protection against mechanical damage.

In the case of product defect, please contact your dealer or authorized service center to arrange repair.

Endorsements for warranty repair

No.	Date of filing	Date of implementation	Description of repair	Signature of contractor
1				
2				

Serial number,	manufacturing date	
Date of sale	ç	Seller

List of of service centers

Fideltronik Inigo Sp. z o.o. Obroncow 25, 03-933 Warsaw tel / fax: +48 022 871 43 36

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