



UPS LUPUS 600VA - 1500VA

(Line Interactive UPS with AVR) (220/230/240VAC)



(<u>www.fideltronikinigo.pl</u>)

Version: 1.2 2022

SAFETY INSTRUCTION

Thank you for purchasing this power protection product. Please read manual carefully and remember about all warnings and operating instructions in this manual strictly.

Save this manual for future use and properly operate installing and using ups unit.

Transportation and preparation for usage

- UPS should be shipped only in the original package to protect against shock and impact.
- Do not dismantle the UPS system, except the specialized technical personnel.
- Do not plug the UPS input into its own output.
- Do not attach a power strip or surge suppressor to the UPS.
- Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS.
- Condensation may occur if the UPS system is moved directly from cold to warm environment. The UPS system must be absolutely dry before being installed. Please allow at least two hours for the UPS system to acclimate the environment.
- Do not install the UPS system near water or in moist environments.
- Do not install the UPS system where it would be exposed to direct sunlight or near heater.
- Do not block ventilation holes in the UPS housing.

Installation

- UPS must be installed in a controlled environment (temperature controlled, indoor area free of conductive contaminants). Avoid installing the UPS in locations where there is standing or running water, or excessive humidity.
- **Caution** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- **Caution** Uninterruptible power systems (UPS) Part 1: General and safety requirements for UPS (reference: EN62040-1) / CE (EN60950-1:2006+A11:2009+A1:2010+A12:2011).
- **Caution** Electromagnetic compatibility (EMC) requirements for UPS (reference: EN62040-2 Category C1) / CE (EN55022:2010; EN55024:2010).

Operation

- Prevent no fluids or other foreign objects from inside of the UPS system.
- Do not connect any devices which would overload the UPS system to the UPS output sockets.
- Place cables in such a way that no one can step on or trip over them.
- Do not connect domestic appliances such as hair dryers to UPS output sockets.
- The UPS can be operated by any individuals with no previous experience.
- UPS must be connected only to an earthed shockproof outlet close to the UPS system.
- Please use only VDE-tested, CE-marked mains cable (e.g. the mains cable of your computer) to connect the UPS system to the building wiring outlet (shockproof outlet).

Maintenance, service and faults

- The UPS system operates with hazardous voltages. Repairs may be carried out only by qualified maintenance personnel.
- **Caution** risk of electric shock. Even after the unit is disconnected from the mains (building wiring outlet), components inside the UPS system are still connected to the battery and electrically live and dangerous.

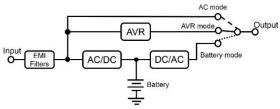
Storage & Maintenance

The UPS system contains no user-serviceable parts. If the battery service life (3~5 years at 25°C ambient temperature) has been exceeded, the batteries must be replaced. In this case, please contact your dealer. Remember VRLA batteries used in ups must be properly recycled !!! Before storing, charge the UPS 5 hours. Store the UPS covered and upright in a cool, dry location. During storage, recharge the battery in accordance with the following table:

Storage Temperature	Recharge Frequency	Charging Duration
0 - 40°C	Every 3 months	1-2 hours

OPERATING PRINCIPLE

LUPUS 600/1000/1500N are standard transformer based UPS build in line-interactive topology with squared type inverter. UPS is dedicated for protecting computers and other electronic devices against unpredictable power loss and instability. Basic blocks of device are: AC Input circuit with overvoltage protection and EMI filters, Battery charger (AC/DC conversion), Inverter (DC/AC conversion), Battery set, AVR circuit (Automatic output voltage regulator), Commutation module and AC output block.



When mains power is stable it is transferred to UPS output via AC pass directly. In case too small or too large mains voltage amplitude AVR circuit modify it and then supply UPS output. At last in case of power fail inverter starts to power UPS output providing needed AC power using energy stored in batteries.

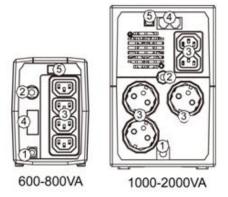
View of UPS LUPUS 600N - 1500N



1000-2000VA

Lupus 600N /1000/1500N with IEC 320 outlets

Lupus 1000/1500N with mixed IEC 320 & CEE7 FR outlets

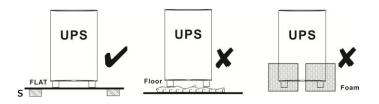


- 1. AC input wire
- 2. Input AC breaker
- 3. UPS protected outlets
- 4. RJ 45 FAX/Modem /LAN protection
- 5. USB communication port

UPS INSTALLATION DEMANDS



• UPS should be placed on flat and clean surface. Should be protected against: dust, vibrations, humid and chemically aggressive environment or high temperature.



- Placing of UPS : UPS during activity may produce heat don't cover ventilation slots.
- Demanded free space around: at least 100mm from sides and 200mm from back plate of ups.

UPS POWER ON

Ups will turn ON automatically after placing plug into AC wall socket.

For switching OFF UPS main front switch must be pressed ON for 3-4 seconds.

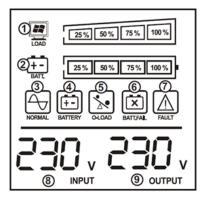
On LCD screen will be shown "UPS OFF".

In order to switch ON ups when is no AC power ("cold start") main front switch must be pressed for about 2-3 seconds, and for turning OFF in battery mode operation main switch should be used for about 4 -5 seconds.

SOUND ALARM

During battery mode operation sound alarm appears 2 times every 8 seconds. After short pressing main switch sound alarm could be blocked or activated again.

LCD DISPLAY view



Lp.	Item	Description	
1	Output Load	Presents current ups output load	
2	Battery charge level	Presents current battery capacity	
3	AC normal	AC power mode	
4	Battery mode	No AC at ups input or wrong AC conditions	
5	Overload output	Too much load at ups output	
6	Battery bad	Replace battery to good one	
7	Fault	Critical error of ups hardware problem	
8	Input voltage value	Currently measured AC input voltage	
9	Output voltage value	Currently measured AC output voltage	
	* Critical Error and Overload will turn on continuous sound alarm !!!		

TROUBLE SHOOTTING

Problem	Possible cause	Solution	
-	Battery voltage < 10V	Charge batteries	
LCD no light	PCB failure	Factory Service	
	Bad AC connection	Connect ups properly to AC source	
battery mode	AC breaker activated	Check load level, switch on breaker	
	PCB failure	Factory Service	
Backup time too short	Batteries not fully charged	Charge batteries for few hours	
	•	Replace batteries; if problem not solved - Factory Service	
Continuous sound alarm	Overload / short output	Reduce load	

TECHNICAL SPECIFICATION

Model	600	1000	1500	
OUTPUT Power max.	600 VA / 360 W	1000VA/600W	1500 VA / 900 W	
Output voltage range	220/230/240 VAC			
Input voltage range	-30 % +25%			
AVR Function	Yes - 2 "boost" levels & 1 "buck"			
Input frequency range	Auto detect 50/60 Hz (+/-10%)			
Input protection	Overvoltage, over current			
Output voltage stability	+/-10% (Battery operation)			
Output frequency stability	50/60 Hz +/- 1Hz (Battery operation)			
Output protection	Over current, short protection			
Transfer time	Typical 6 ms, 10 ms max.			
Output voltage shape	Approximated sinwave (SQUARED)			
Nominal DC voltage	12V	24V	24V	
Batteries	12 V/7 Ah	12 V/7 Ah x 2	12V/9 Ah x 2	
Charge time	4-6 hours to 90% capacity			
Dimension (DxWxH) mm	315 x 100 x 141	343 x 135 x 208	343 x 135 x 208	
Wight (kgs)	5,2 kg	9,5 kg	11 kg	
Humidity	0-90 % RH @ 0-40°C (no condensation)			
Noise level	< 40 dB			

*Specifications may be changed without further notice.

BATTERY EXCHANGE

Typical life time of VRLA batteries is 3 to 5 years.

Temperature above 25°C, frequent deep discharge may make this period even shorter.

• WARNING !!!

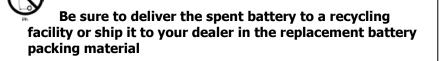
- Exchange of battery should be done by qualified personnel.

- Batteries Exchange must be done when ups is disconnected from load and mains source.

- UPS could generate danger voltage even when is disconnected from AC line, always it must be remembered.

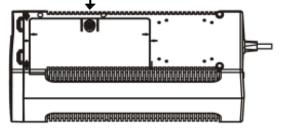
- Batteries should be changed to proper type dedicated to this UPS type.
- Old batteries must be recycled properly according to local regulations.

IT IS HIGH DEMAND TO FOLLOW ALL FORMAL PROCEDURES AND REGULATION DURING ANY SERVICE ACTIVITY WITH ELECTRICAL DEVICES SUCH AS UPS AND VRLA LEAD ACID BATTERIES !!!

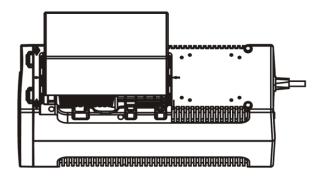


Main steps during battery replacement:

- 1. Switch off and disconnect all loads from ups outlets.
- 2. Turn UPS OFF.
- 3. Disconnect UPS from AC line.
- 4. Press down battery cover and push it in direction presented on picture below.



5. After removing cover disconnect batteries and pull out battery set .



6. Place new batteries inside, connect wires proper way as it was before and close cover.7. UPS is ready to operate with new battery set.

SOFTWARE MONITORING

UPS could communicate with computer via USB port using cable A-B type. Cable is included in UPS set with individual license number KEY for software.

Monitoring software program is called **UPSILON 2000.**

With user manual is added product KEY and link for download on separate document.

In case of loosing KEY a new license must be bought !!!



View of Upsilon 2000 license document above. (www.megatec.com.tw).

WARRANTY TERMS (for POLAND area only)

UPS warranty is given for 24 months from date of invoice.

Any failures reviled during this period will be solved without any cost in term no longer than 14 days from delivery of unit to authorized service point.

Warranty is perform in "door to door" system and is proceeded in central company service. Delivery is done at Fideltronikinigo cost via authorized express company.

All detailed information's are placed on our web site or could be obtain in direct contact to company office.

In order to perform proper shipment way in case of need we suggest preserve original ups package and foams !

Company could not take responsibility if devices sent to service will be mechanically damaged as a result of poor packing way.

From warranty are excluded such issues:

- damage caused by unit use against terms placed in manual and general purpose;
- damaged caused via wrong shipment or not proper maintenance of unit;
- mechanical damage and any damage via exposition to heat, liquids atc.;
- damages after unauthorized changes in unit construction
- all activities that are explained in user manual as obliged to user : installation,

configuration, testing, basic user maintenance, etc.

In case of any technical problems please contact with dealer or company service.

Company web site : **www.fideltronikinigo.pl**