

NETYS PE

600-2000 VA



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WARRANTY CERTIFICATE AND CONDITIONS

This SOCOMEC appliance is guaranteed against manufacturing and material defects for a period of 12 months from the date of purchase (local warranty conditions are applicable in addition to the general conditions). This warranty certificate should NOT be e-mailed, but kept by the customer along with proof of purchase, for use in the event of a claim being made for repairs or replacement under warranty.

The warranty period commences on the date the new product was purchased by the end user at an authorised show-room (reference details are shown on the receipt).

Return-to-base warranty is provided: components and labour for repairs supplied free of charge, any products to be replaced must be returned to SOCOMEC or authorised service centres, at the customer's own risk and expense.

The warranty is recognized within national territory. If the UPS is exported out of national territory, the warranty shall be limited to the cover of the parts used to repair the fault.

To claim service under the warranty please observe the following:

The product must be returned in the original packing. Any damage caused during shipping in packaging other than the original will not be covered by the warranty;

The product must be accompanied by proof of purchase such as an invoice or receipt indicating the date of purchase and product ID information (model, serial number). The sender must also attach the reference number issued to authorise the return of the product, together with a detailed description of the defect. If any of this information is missing the warranty will be invalid. The authorisation number is issued by service centres over the telephone on receiving information on the malfunction in question;

If it is not possible to provide proof of purchase the serial number and date of manufacture will be used to calculate the probable expiry date of the warranty; this could result in a reduction of the original warranty period.

The warranty on the product does not cover damage caused by carelessness (improper use: wrong input power, explosions, excessive humidity, temperature, poor ventilation, etc.), tampering or any unauthorised repair work.

During the warranty period, SOCOMEC reserves the right to decide whether the product should be repaired, or whether to replace defective parts with new parts, or used parts that are equivalent to new parts in terms of functionality and performance.

In the case of batteries, warranty is valid only if the battery has been recharged regularly in accordance with the manufacturer's instructions. On purchasing the product it is advisable to check that the next recharge date indicated on the packaging has not expired.

Battery

Batteries are treated as consumable parts and warranty only covers manufacturing defects.

Batteries must be stored in compliance with Supplier recommendations.

Warranty is valid only if the battery has been recharged regularly in accordance with the manufacturer's instructions. On purchasing the product it is advisable to check that the next recharge date indicated on the packaging has not expired.

Optionals

A 12-month return-to-base warranty is provided on optionals.

Software products

Software products are guaranteed for 90 days. The software is guaranteed to work as indicated in the manual accompanying the product. Hardware media or accessories (e.g. diskettes, cables, etc.) used with appliances are guaranteed free of material or manufacturing defects under normal conditions of use for a period of 12 months from the date of purchase. SOCOMEC UPS will not be responsible for damages (including loss of income, interruption of business activity, loss of information or other financial losses, of any nature) arising from the use of the product.

These conditions are subject to Italian law. Disputes shall come under the jurisdiction of Court of Vicenza.

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1. SAFETY STANDARDS

1.1 IMPORTANT INFORMATION

This manual should be kept in a safe place near the UPS, so it can be consulted by the operator at any time for information on the correct use of the unit. Read the manual carefully before connecting the unit to the ac. mains supply and downstream appliances. Before the UPS is put into commission the user should be completely familiar with its operation, the position of all the controls and the technical and functional characteristics of the unit, to ensure there will be no risk to people or the appliance itself.

This unit is designed for installation 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 any other liquid in addition to commercial transport, nuclear facilities or any other systems where failure of the product may cause serious damage to people or property.

- Before being started-up, the unit must be connected to an earthed socket, in accordance with current safety regulations. The manufacturer declines all liability for any damage or accidents resulting from failure to observe this requirement.
- The socket should be installed near the equipment and easily accessible to remove the UPS power cable in the event of an emergency.
- Disconnect and disable the UPS completely in the event of emergency, by pressing the ON/OFF button to shut it down and disconnect the power cable from the socket.
- Do not disconnect the power cable during normal operation as this would disconnect the protective earth of the UPS and all connected loads.

	CAUTION! Risk of electric shock. Even after the unit is disconnected from the mains, components inside the UPS system will still be connected to the battery and live and dangerous.
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- Use the UPS in accordance with the technical specifications indicated at the end of this manual.
- Avoid exposing the UPS to contact with water or any other liquids. Do not insert foreign objects into the cabinet.
- The UPS system operates with hazardous voltages. Repairs must only be carried out by qualified maintenance personnel.
- The UPS system features its own, internal current source (batteries). The UPS output sockets or output terminal block may be live even if the UPS system is not connected to the mains.

	CAUTION! <ul style="list-style-type: none">• A battery can present a risk of electric shock and burns from high short-circuit current.• Defective batteries can reach temperatures that exceed burn thresholds for touch surfaces.
	It is very dangerous to touch any part of the batteries as there is no isolation between the batteries and the mains power source.

- Never force, break or attempt to open the batteries. These batteries are sealed, maintenance-free components containing substances that are harmful to health and a source of environmental pollution. If liquid can be seen leaking from the battery, or a white powdery residue is noticeable, do not switch the UPS on.

	Danger of explosion if batteries are replaced with the wrong type.
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- Used batteries must be disposed of at authorised waste disposal centres.

	CAUTION Users should be aware that any changes or modifications not expressly approved by Socomec could void invalidate authorisation to operate the equipment.
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- If the appliance is to be scrapped contact a specialist waste disposal company which will dismantle and dispose of the various components in accordance with legislation in the country of purchase.

	<p>WARNING! This is a category C2 UPS product. In a residential environment, this product may cause radio interference, in which case the user may be required to take additional measures.</p>
	<p>CAUTION IF DAMAGED. NON-SPILLABLE BATTERIES. Crushed, damaged or ripped packages displaying their contents should be placed in an isolated area and inspected by a qualified person. If a package is unshippable the contents must be promptly gathered together, segregated, and the consignor or consignee contacted.</p>
	<p>All packaging material must be recycled in compliance with legislation in the country where the system is installed.</p>

 The crossed-out trash bin symbol is placed on this product to encourage users to recycle components and units whenever possible. Please be environmentally responsible and recycle this product through your recycling facility at the end of its lifetime.

 For any questions regarding the disposal of the product, contact local distributors or retailers.


<18 kg
<40 lb


18-32 kg
40-70 lb


32-55 kg
70-120 lb


>55 kg
>120 lb





1.2 DESCRIPTION OF SYMBOLS

Comply with all instructions and warnings on labels and plates inside and outside the equipment.

	<p>DANGER! HIGH VOLTAGE (BLACK/YELLOW)</p>
	<p>READ THE USER MANUAL BEFORE USING THE UNIT</p>

1.3 WARNING LABEL

902	 CAUTION:
<ul style="list-style-type: none"> • For operation read user manual including safety warning first! • This unit may be opened by authorized technicians only! • Even when switched off there is a hazardous voltage on the battery side! • Lead acid battery in the inside of the enclosure! • Isolate uninterruptible power supply (UPS) before working on this circuit. 	
<p>WARNING: HIGH VOLTAGE INSIDE!</p>	
<p>WAIT 5 MINUTES BEFORE REMOVING THE COVER PROTECTIONS!</p>	

2. REQUIREMENTS FOR INSTALLATION

2.1 ELECTRICAL REQUIREMENTS

- Check the operating voltage and frequency settings are correct for the mains power supply at the installation site. Details on the technical specification page.
- When using the UPS for the first time, it is advisable to leave the battery on charge for a minimum of 8 hours.
- Only use manufacturer-supplied or recommended cables and accessories for connections to the USB serial interface.
- For better operation, please do not use the input/output power cord sets (IEC C13 to IEC C14) longer than 2m
- Do not connect appliances or devices which would overload the UPS system (e.g. laser printers) at the UPS output sockets.

3. UNPACKING AND INSTALLATION

3.1 UNPACKING

Remove the UPS and all accessories provided (cables, etc) from the packing case.

It is always advisable to keep the original packaging which has been specially designed for safe transport, in case the unit has to be moved again.

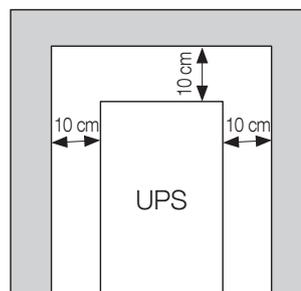
3.2 REQUIREMENTS FOR INSTALLATION



Make sure you have read and understood chapter 1 - Safety Standards before proceeding

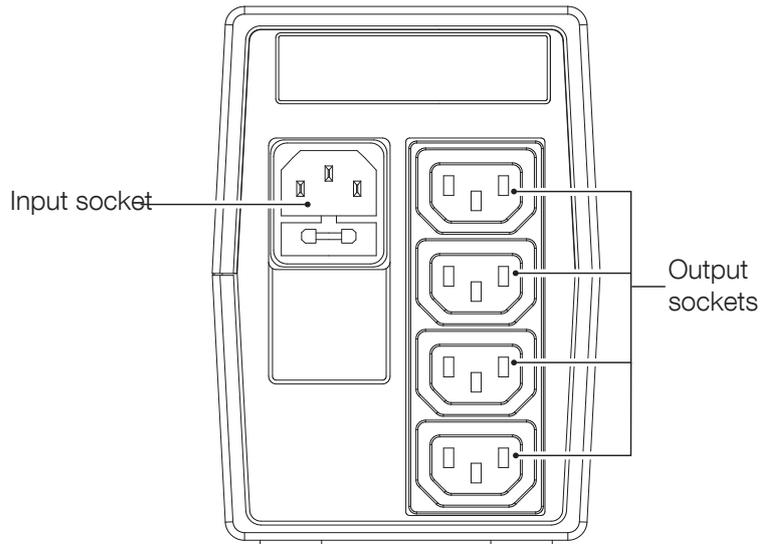
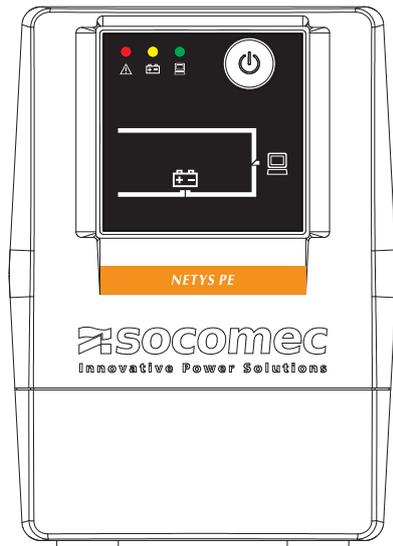
- Netys PE has been designed for indoor use.
- Place the UPS on a flat, stable surface, in a ventilated environment away from heat sources and exposure to direct sunlight.
- Keep ambient temperature between 0 °C and 40 °C and humidity less than 90% (non-condensing); the best temperature to guarantee longest battery lifetime is 15-20 °C.
- Condensation may occur if the UPS system is moved directly from a cold to a warm environment. The UPS system must be completely dry before being installed. Please allow at least two hours for the UPS system to become acclimatised to the environment.
- Ensure that the environment where the UPS will be installed is not dusty.
- Do not place the UPS or any other heavy object on the cables.
- A space of at least 10 cm must be left at the back for adequate ventilation (see figure 3.2-1).

3.2-1

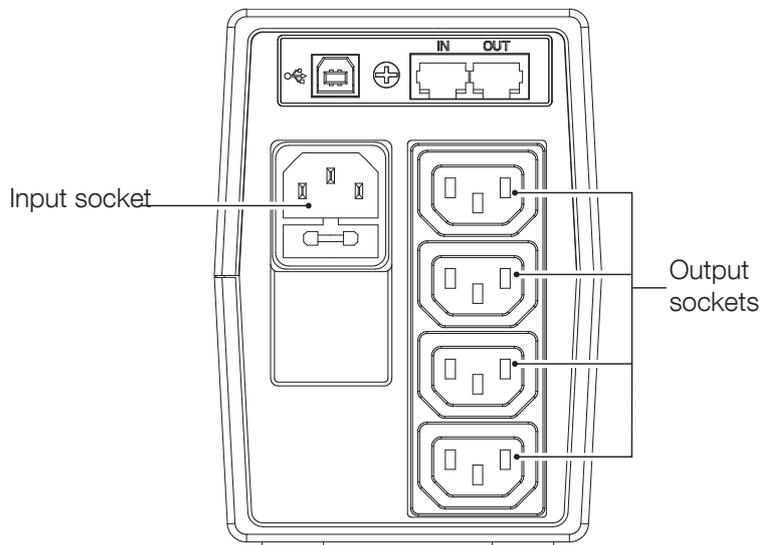


4. FRONT REAR VIEW

(IEC MODELS)



NETYS PE 600 VA



NETYS PE 650-850 VA

YELLOW LED flashing:

BATTERY MODE

(mains absent or abnormal) - load protected

Alarm

Intermittent every 10 seconds: BATTERY MODE

Intermittent every second + RED LED: BATTERY LOW

RED LED:

UPS failure

Alarm

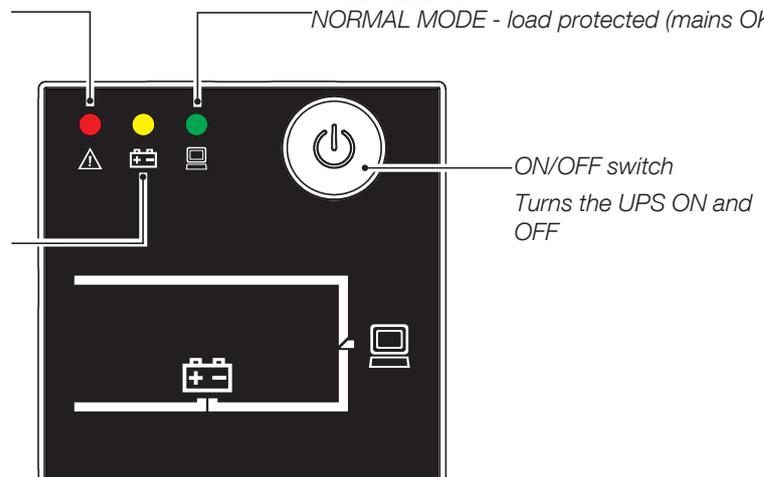
Intermittent every 0.5 second: overload

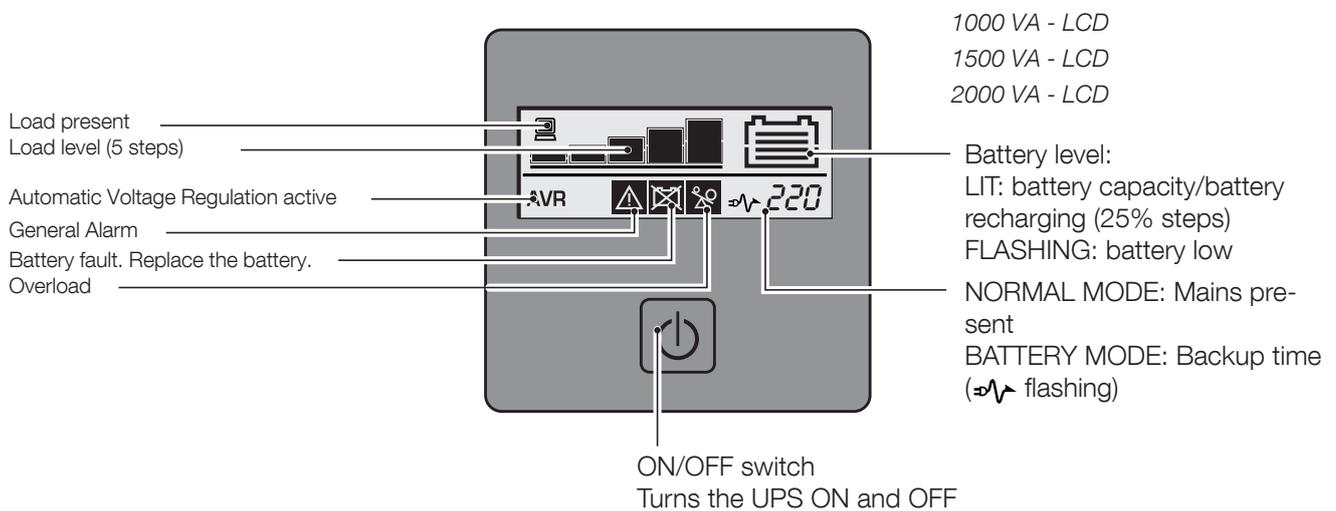
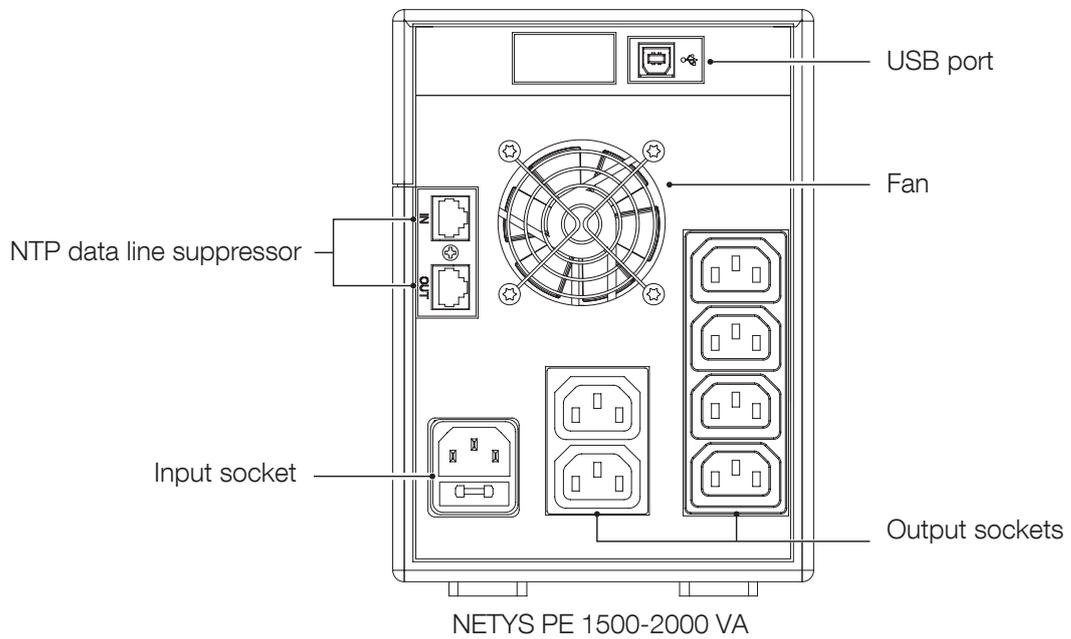
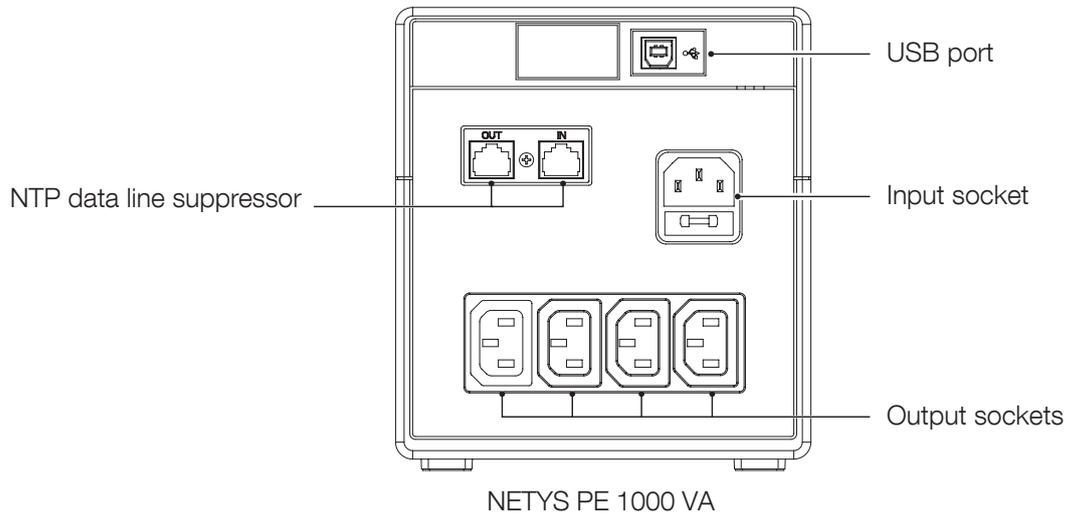
Intermittent every 2 seconds: battery needs replacing

Continuous: UPS failure

GREEN LED lit:

NORMAL MODE - load protected (mains OK)





5. MODES OF OPERATION

5.1 SWITCHING THE UPS ON



Note:

The UPS will only switch on if the battery has enough charge.

5.1.1 SWITCHING THE UPS ON WITH MAINS PRESENT

Switch the UPS on by pressing the ON/OFF button on the front panel.

All LEDs will light up and the buzzer will sound for few seconds before the green LED remains lit.

The UPS is set at the same frequency (50 or 60 Hz) and the load is protected and powered.

5.1.2 SWITCHING THE UPS ON WITHOUT MAINS

Switch the UPS on by pressing the ON/OFF button on the front panel.

All LEDs will light up and the buzzer will sound for few seconds before the yellow LED remains lit.

The UPS will run in battery mode at 50 Hz.

5.2 SWITCHING THE UPS OFF



WARNING!

This UPS has been designed to control and maintain the battery charge; therefore it should only be switched off completely in exceptional circumstances.

To shut the UPS down completely, press and hold down the ON/OFF button down. The UPS switches off all LEDs and is then fully disabled. If the mains cable is not disconnected the battery charger remains active.

5.3 NORMAL MODE

When mains power is within the acceptable range, the Normal Mode LED indicator on the front panel stays on permanently. Loads are powered from the mains power supply either directly or through the AVR stabiliser which intervenes in the case of voltage peaks or drops; the charger works in all conditions.

5.4 BATTERY MODE

The UPS automatically switches to this operating mode when mains power fails (spikes or lengthy power cuts) or if the mains is at a value considered to be dangerous; users are powered using the energy stored in the batteries converted to an AC voltage through the inverter.

In this mode, a slow intermittent alarm sounds, and the Battery Mode LED indicator on the front panel flashes.

In the case of prolonged mains failure, the UPS powers loads until it shuts down when the batteries are fully depleted.

Just before shutdown, when the battery charge runs out fully, low battery charge is signalled via a rapid intermittent acoustic alarm.

The UPS automatically returns to normal operating mode when the mains power is restored.

5.5 OVERLOAD

The UPS can power loads up to the power rating stated on the machine's data plate at the rated mains voltage; once this limit is exceeded, the machine goes into overload conditions. Overloads are signalled by a rapid alarm.



WARNING!

Significant overloads could cause permanent damage to the UPS!

Avoid connecting laser printers that generate absorption peaks liable to cause overloads on the UPS.

6. SOLUTIONS TO MINOR PROBLEMS

Optimal unit operation is obtained by keeping it constantly powered (24 hours a day). This guarantees correct maintenance of the battery charge.

	WARNING! The UPS generates hazardous electrical voltages internally.
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All maintenance must only be performed by authorised personnel.

If there is difficulty in getting the UPS to work, the reason may be among those listed below. For any other problems, you are advised to contact your dealer or service organisation directly.

For quick, effective action it is important to give precise details of the fault when you call, in addition to the model number and manufacturer's serial number, which can be found on the compliance and inspection certificate or on the data plate on the bottom of the UPS.

6.1 TROUBLESHOOTING MINOR PROBLEMS

Problem	Possible cause	Solution
The UPS works in battery mode even if mains power is available	Poor connection to the input mains	Check the cable connection going to the UPS and the mains outlet
	The mains voltage is out of range	No solution because mode of operation is correct
	Input protection triggered (blown fuse or automatic switch)	Replace the input fuse with another of the same type or reset the automatic switch
Backup time shorter than expected	Batteries not fully charged	Leave the batteries to charge for 8 consecutive hours
	Batteries not working properly	Have the batteries replaced by authorised personnel
The UPS stalls/goes into overload	Overload on the load line	Check that the load applied is not greater than the maximum permitted or reduce the load power requirement

	If the equipment is to be left unused for a long period, wait for the batteries to charge fully before switching off. While the UPS is not being used ensure the batteries are recharged for 24 hours at least once every 4 weeks.
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7. BATTERY REPLACEMENT

For authorised personnel only!

- Servicing of batteries should be performed or supervised by personnel knowledgeable about batteries and required precautions.
- When replacing batteries, replace with the same type and number of batteries or battery packs.

	CAUTION Do not dispose of batteries in a fire. The batteries may explode.
	CAUTION Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
	CAUTION A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries.

- Remove watches, rings or other metal objects.
- Use tools with insulated handles.
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect the charging source prior to connecting or disconnecting battery terminals.
- Determine if battery is inadvertently grounded. If inadvertently grounded, remove source from ground. Contact with any part of a grounded battery can result in electrical shock. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance.

8. SPECIFICATIONS

Models	NPE-B600	NPE-0650 NPE-0650-AU	NPE-0850 NPE-0850-AU	NPE-1000-LCD NPE-1000-LCD-AU	NPE-1500-LCD NPE-1500-AU	NPE-2000-LCD NPE-2000-LCD-AU	
Power	600 VA	650 VA	850 VA	1000 VA	1500 VA	2000 VA	
	360 W	360 W	480 W	600 W	900 W	1200 W	
Technology	Line Interactive						
Electrical specifications - Input mains							
Input nominal voltage	230 Vac						
Input mains voltage	140 - 300 Vac			170 - 280 Vac			
Input mains frequency (nominal)	50/60 Hz +/-5 % auto sensing						
Input mains connection	IEC 320-C14						
AC FUSE Protected	T5A, 250Vac		T10A, 250Vac			T15A, 250Vac	
Electrical specifications - Output							
Automatic Voltage Regulation (AVR)	•	•	•	•	•	•	
Voltage (in Battery Mode)	230 Vac ±10%						
Frequency (in Battery Mode)	50/60 Hz ±1 Hz (default 50 Hz)						
Wave form	Step wave						
Protection	Overload, Battery Overvoltage Protection, (deep discharge and short circuit in battery mode)						
Load connection socket	4 x IEC C13				6 x IEC C13		
Short-Circuit Current (as required by IEC 62040-1)	Approx. 144Apeak	Approx. 152Apeak	Approx. 152Apeak	Approx. 360Apeak	Approx. 364Apeak	Approx. 362Apeak	
	Approx. 15.3Arms	Approx. 15.3Arms	Approx. 15.6Arms	Approx. 15.6Arms	Approx. 16.2Arms	Approx. 16.1Arms	
Applicable power grid power distribution system	TN						
Battery							
Typical backup time (PC + LCD monitor)	15 min	25 min	45 min	55 min	60 min		
Battery type	Sealed lead acid						
Battery recharge	Under permanent charge even when the UPS is off (mains present)						
Recharge Time	6 – 8 h typical						
Environment							
Noise level at 1 metre	< 40 dBA			< 45 dBA			
Operating temperature	0-40 °C (15-25 °C for optimum battery life)						
Storage Temperature	-20 - +50°C						
Environment	Humidity: 90% non-condensing						
Operating Altitude	2000m(6562 ft) above sea level						
Storage Altitude	2000m(6562 ft) above sea level						
Pollution	PD2						
Overvoltage category	II for normal mode						
Enclosure	IP20						
Reference Standards	IEC 62040-1; EN IEC 62040-1, AS 62040.1.1, AS 62040.1.2 EN 62040-2; AS 62040.2						
Product certification	CE, RCM (E2376)						
Mechanical characteristics							
Dimensions (W x D x H)	mm	100 x 300 x 145		145 x 345 x 165	145 x 390 x 205		
Net weight	kg	4.1	4.4	5.2	9.7	11.2	12

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POWER
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POWER
CONVERSION



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- Optimisation
- Consultancy, commissioning and training

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- Singapore • Slovenia • South Africa • Spain • Sweden
- Switzerland • Thailand • Tunisia • Turkey • UK • USA

80 countries

where our brand is distributed



552529A - EN 10, 2023

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