

# NETYS PL

600 - 800 VA

安装及操作手册 (CN)

Installations- und bedienungsanleitung (DE)

Manual de instalación y uso (ES)

Manuel d'installation et d'utilisation (FR)

Installation and operating manual (GB)

Manuale di installazione e uso (IT)

Installatie- en bedieningshandleiding (NL)

Dokumentacja Techniczno-Ruchowa (PL)

Manual de instalação e funcionamento (PT)

Manual de instalare și utilizare (RO)

Руководство по установке и эксплуатации (RU)

Navodila za priključitev in uporabo (SI)

Kurulum ve kullanım kılavuzu (TR)

# WARRANTY CERTIFICATE AND CONDITIONS

This SOCOMEC UPS 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 showroom (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 UPS 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 UPS 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.

SOCOMECE 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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This document is not a specification. SOCOMEC UPS reserves the right to make any changes to data without prior notice.

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# 1. SAFETY STANDARDS

## 1.1. IMPORTANT

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

- **Before being started up, the unit must be equipotentially bonded, in accordance with current safety regulations.** The earth wire of the UPS must then be connected to an efficient earth system.
- **If the earth connection is not made, the appliances connected to the UPS will not be equipotentially bonded.** In this situation, the manufacturer declines all liability for any damage or accidents that could derive from failure to observe the requirements.
- **Should a power outage occur (UPS in stand-alone mode), do not disconnect the power cord from the mains, as this will break the earth connection to bonded appliances.**
- **All subsequent maintenance operations must be entrusted only to authorized service engineers.** The UPS generates high internal voltages that could be hazardous for a maintenance operative not in possession of the appropriate skills and training for this type of work.
- **If a hazard situation should arise at any moment when the UPS is in use,** isolate the unit from the power supply (by operating a switch at the upstream PDU if possible) and switch the appliance off completely by running the shutdown procedure.
- **The UPS houses a source of electrical energy, namely its batteries. The output of the UPS may be under power even when the appliance is not connected to the a.c. mains supply.**
- **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.**
- **Avoid exposing the UPS to contact with water or any liquids generally. Do not insert foreign objects into the cabinet.**
- **Danger of explosion if the batteries are replaced with others of the wrong type.**
- **Replaced batteries must be disposed of at authorised waste disposal centres.**



It is very dangerous to touch any part of the batteries as there is no isolation between the batteries and the mains power source.



**CAUTION!**  
A battery can present a risk of electrical shock and high short circuit current.

- **If the appliance is to be scrapped,** it must be entrusted exclusively to a specialist waste disposal company. These companies will split up and dispose of the various components in accordance with statutory regulations in the country of purchase.
- Since the power cord of the UPS functions as an isolating device, ensure ready access to the mains power socket where the UPS is connected, and/or to the rear panel of the UPS, so the unit can be easily unplugged.
- The UPS generates a **leakage current** of approximately 3 mA. To guarantee the maximum leakage current of 3.5 mA, make certain that the leakage current generated by the load is no greater than 0.5 mA. Should the leakage current from the load exceed this limit, instruct a skilled engineer to install an industrial type connection (to IEC 309 standard) between the UPS and the a.c. mains supply, sized to handle a current compatible with the rating of the appliance.
- Use the UPS in accordance with the technical specifications indicated in this manual (chapter 11).
- In the event that the equipment has no automatic backfeed protection contactor device, make certain that:
  - the user/installer attaches warning labels to all mains isolating switches located remotely from the area where the UPS is sited, in order to inform service personnel that the circuit is connected to a UPS.
  - an external isolating device is installed, as indicated in figure 1-1.
- The product you have chosen is designed for commercial and industrial use only.
- The product you have selected, given the specified conditions of use, capacity and performance limits, is designed exclusively for commercial and industrial service. The use of the product in "critical applications" could require compliance with statutory regulations and standards, or with specific local bylaws, or adaptation to SOCOMEC UPS recommendations. For this type of use, in any event, it is advisable to contact SOCOMEC UPS beforehand for confirmation regarding the capacity of products to meet required levels of safety, performance and reliability. The expression "critical applications" covers, in particular, life support systems, medical applications, commercial transport, nuclear facilities or any other systems where failure of the product might on occasion cause serious damage to persons or property.



## WARNING!

This is a product for commercial and industrial application in the second environment – installation restrictions or additional measures may be needed to prevent disturbances.



## CAUTION IF DAMAGED.

### BATTERIES, NON SPILLABLE.

Packages, crushed, punctured, or torn such that contents are revealed must be set aside in an isolated area and inspected by a qualified person. If the package is deemed to be not shippable, the contents must be promptly collected, segregated, and either the consignor or consignee contacted.



All packaging material must be recycled in compliance with the laws in force in the country where the system is installed.

## 1.2. DESCRIPTION OF THE SYMBOLS USED ON LABELS ATTACHED TO THE UNIT

All precautions and warnings on labels and plates on the inside and outside the equipment should be observed.



**DANGER! HIGH VOLTAGE (BLACK/YELLOW)**



**GROUND TERMINAL**



**READ THE USER MANUAL BEFORE USING THE UNIT**

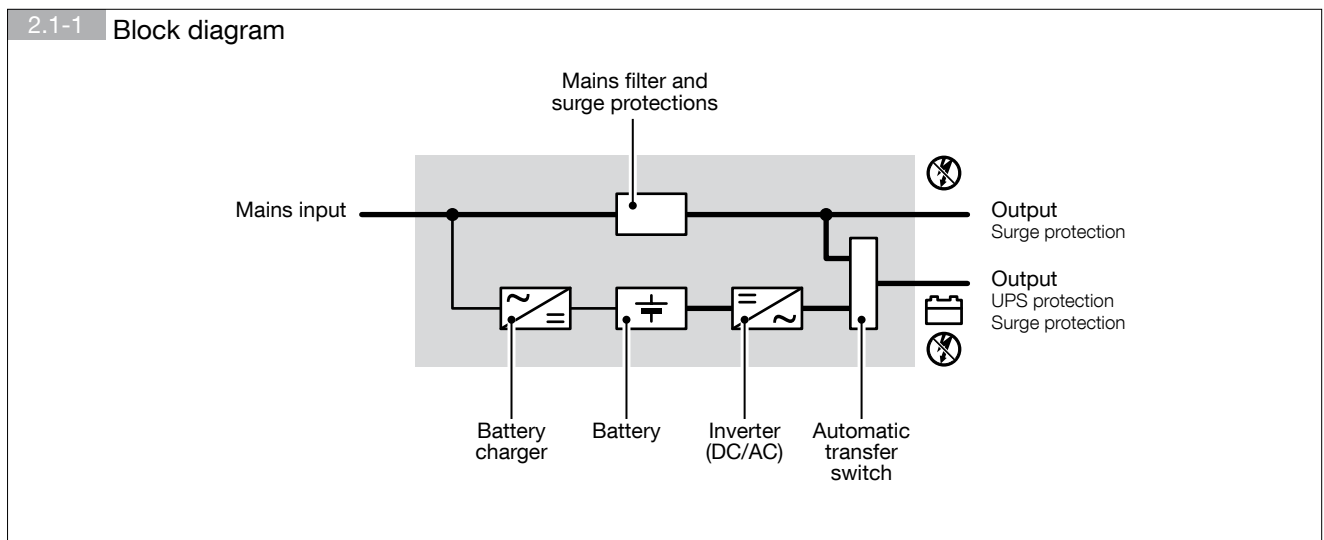
## 2. GENERAL DESCRIPTION

The main purpose of the UPS is to protect sensitive and critical equipment from electrical disturbances that could compromise operation. Power cuts, voltage drops, variations in voltage and frequency, lightning, electrostatic discharges and rapid over voltages are phenomena found in all office and industrial environments and which cause damage to the hardware and loss of data.

NETYS PL is an Uninterruptible Power Supply designed to power computers and connected peripherals, with the exception of any other electrical device (such as household appliances, television sets, stereo systems and video recorders).

### 2.1. INTRODUCTION

The characteristic feature of these UPS systems is the constant monitoring of the power supply which, duly filtered and stabilised (on models with AVR) and if considered suitable, is used to supply consumers. In the case of a mains failure or if the mains is considered to be outside limits accepted by the load, the inverter (the heart of the UPS) is activated immediately. Drawing on the power stored in the batteries, the inverter generates a voltage that instantly takes over from the mains without any disruption to the equipment connected. During operation under emergency conditions, the internal batteries discharge but are recharged again automatically when mains power returns. Being hermetically sealed, the batteries do not require maintenance of any kind at any stage in their working life.



# 3. UNPACKING AND INSTALLATION

## 3.1. UNPACKING

Remove the UPS and all accessories provided (cables, CD-ROMs, 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. ENVIRONMENTAL REQUIREMENTS FOR INSTALLATION

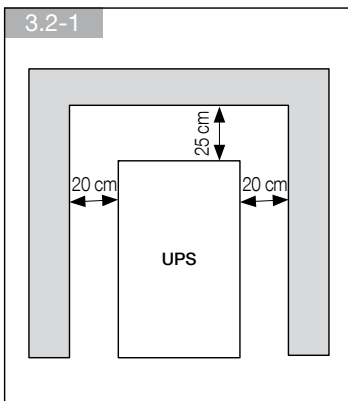


Please read the following before installing the UPS.

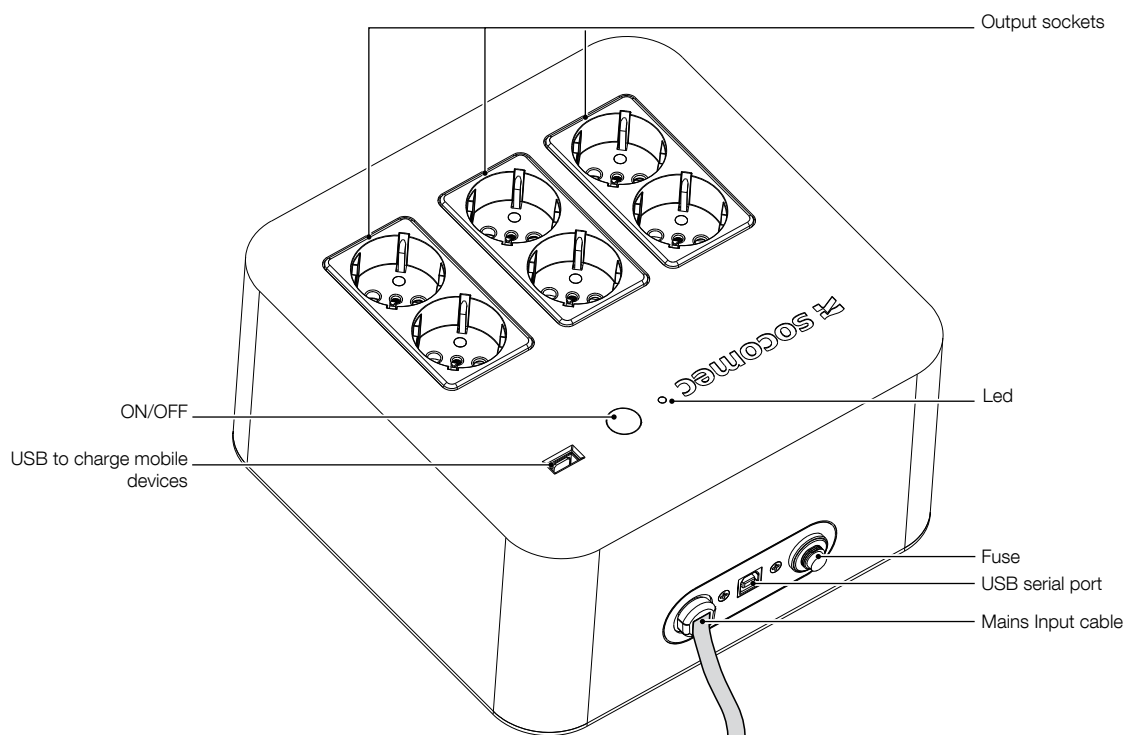
- NETYS PL has been designed for use in closed environments.
- Place the UPS on a flat, stable surface, in a ventilated environment away from heat sources and exposure to direct sunlight.
- Keep ambient temperature between 0 °C and 35 °C and humidity less than 90% (non-condensing); the best temperature to guarantee longest battery lifetime is 15±20 °C.
- Ensure that the environment where the UPS will be installed is not dusty, and leave a space of at least 20 cm around it to allow for adequate ventilation and access to the rear panel.
- Do not place the UPS or any other heavy object on the cables.
- Check that the voltage and frequency preset for operation is correct for your electrical power supply by consulting the information on the data plate.
- Use only manufacturer-supplied or recommended cables and accessories for connections to the USB serial interface.

It is recommended that the batteries are charged for 8 hours the first time the unit is used.

- A space of at least 25 cm must be left at the back for adequate ventilation (see figure 3.2-1).



# 4. PRODUCT



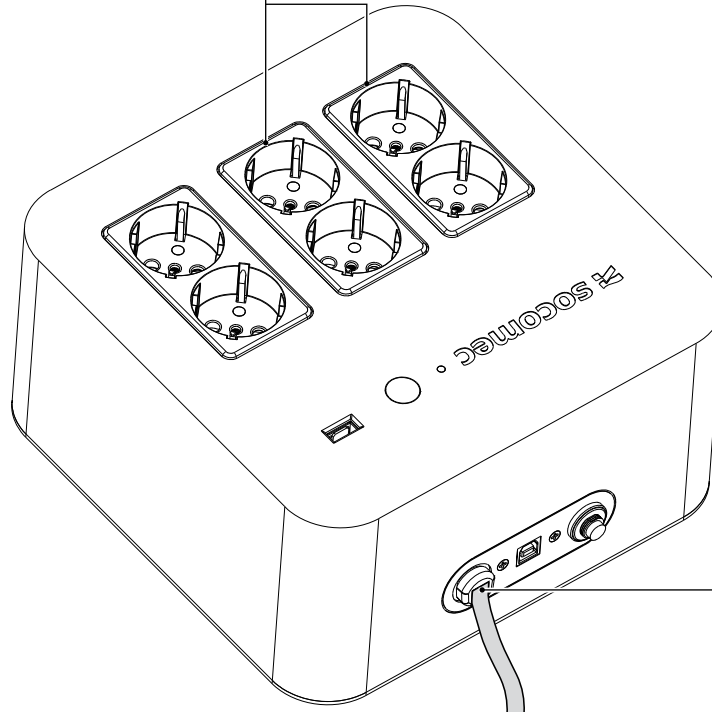


# 5. CONNECTIONS



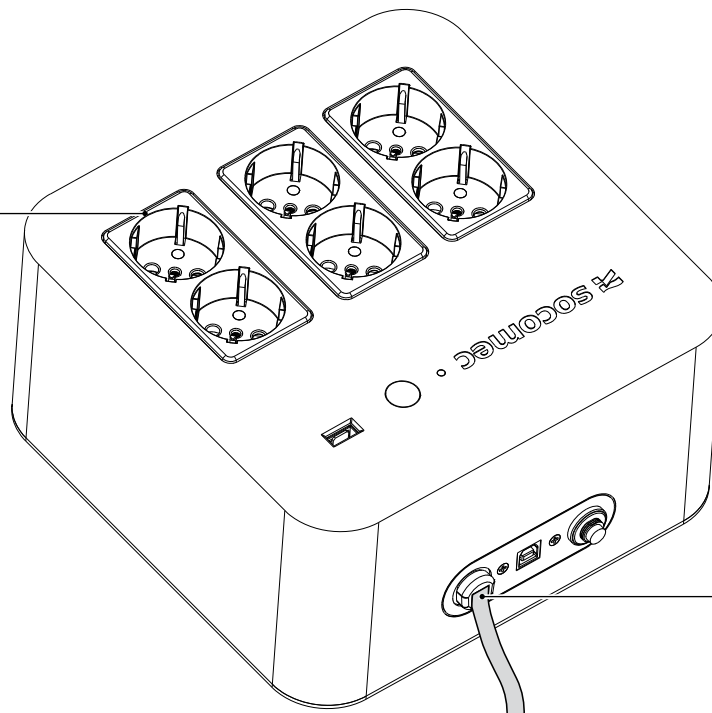
Cables with an appropriate cross-section and which are compliant with safety standards in force should be used for connection to the mains and connection of the loads.

**OUT 230 V~**  
4 load connection socket for  
UPS and surge protection.



**IN 230 V~**  
Connect the UPS  
power cord to the  
mains power supply.

**OUT 230 V~**  
2 load connection sockets for  
surge protection.



**IN 230 V~**  
Connect the UPS  
power cord to the  
mains power supply.

## 6. MODES OF OPERATION

### 6.1. SWITCHING THE UPS ON

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

The **Normal Mode LED** will light up; allow ten seconds for the self-configuration procedures to run.

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

### 6.3. NORMAL MODE

When mains power is available and the voltage falls within the acceptable range, the **Normal Mode LED** on the front panel remains on permanently. The loads are powered from the mains power supply either directly, the batteries are constantly recharged.

### 6.4. 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 users until it shuts down when the batteries are fully depleted (see the chapter COMMUNICATION for ordered shutdown via software).

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 about two seconds after the mains power is restored. The time taken to transfer from normal to battery mode and vice-versa is imperceptible to the load.

### 6.5. OVERLOAD

The UPS can power loads up to the power rating declared on the machine's data plate; once this limit is exceeded, the machine goes into overload condition. Overloads are signalled by a rapid sounding acoustic 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.

## 7. COMMUNICATION

The UPS provides excellent protection against interruptions or imperfections in the mains power supply. In such cases the computer (load) is powered by the UPS using battery power until this runs out.

Various software applications and communication options are available to optimise operation of the UPS and to correctly manage shutdown when backup power ends. The status of the UPS can be monitored, keeping track of all mains failures and battery discharges so as to activate an automatic and orderly procedure to close the programs and shut down the system. When mains power returns the system will restart automatically.

All NETYS PL models are equipped with a USB communication interface (not available on the standard model).

### 7.1. SOFTWARE OPTIONS

Software for monitoring and shutdown can be used on NETYS PL thanks to its USB connection. These solutions have been specially designed for the efficient management of power protection devices.

**Local View** ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux® and Mac OS X® operating systems.

Visit [www.socomec.com](http://www.socomec.com) and click on **DOWNLOAD** then **SOFTWARE** to find the communication software suitable for your requirements. See the CD provided.

## 8. SOLUTIONS TO MINOR PROBLEMS

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



**WARNING!**

The UPS internally generates hazardous electrical voltages.

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.

### 8.1. TROUBLESHOOTING FOR 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 hours consecutively
	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.

## 9. TECHNICAL SPECIFICATIONS

<b>Models</b>		
Power (UPS protection)	600 (360 W)	800 VA (480 W)
Power (Surge protection)	1200 VA	1200 VA
Technology	High Frequency Step Wave	
<b>Electrical specifications - Input</b>		
Voltage	180÷270 V	
Frequency (nominal)	50/60 Hz with automatic selection	
Mains connection	Cable with plug	
<b>Electrical specifications - Output</b>		
Voltage (in Battery Mode)	230 V ±10%	
Frequency (in Battery Mode)	50/60 Hz ±1 Hz	
Wave form	Stepwave	
Protection	Overload, deep discharge and short circuit	
Load connection sockets	n° 4 load connection socket for UPS and surge protection n° 2 load connection socket for surge protection	
<b>Battery</b>		
Typical back-up time (PC + 17" LCD monitor)	15 min	20 min
Battery recharge	Under permanent charge even when the UPS is off (mains present)	
<b>Reporting and Communication</b>		
Communication interface	USB	
Local communication software	UPS Management software	
<b>Environment</b>		
Noise level at 1 meter	< 40 dBA	
Temperature	0÷40 °C (15÷25 °C for optimum battery life)	
Environment	Humidity: 90% non-condensing	
Reference standards	EN 62040-1 (safety), EN 62040-2 (EMC)	
<b>Mechanical characteristics</b>		
Dimensions (W x D x H)	220 x 220 x 123 mm	
Net weight	3.6 kg	4.1 kg





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## YOUR DISTRIBUTOR



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