

ups

LEVEL 2

**PROTEQ** UNINTERRUPTIBLE POWER SUPPLY

LINE-INTERACTIVE TECHNOLOGY

625VA - 3000VA



**USER'S MANUAL**

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Revision 3

Revised May 07

# Introduction

## **Save these instructions**

### **Please read and save this manual**

Thank you for selecting this uninterruptible power supply (UPS). The manual is a guide to the correct installation and use of the UPS system. It includes important safety instructions for the operation and correct installation of the UPS. If you should have any problems with the UPS, please refer to this manual before calling the Powertecnicque customer service department for further assistance.

### **Please save or recycle the packaging materials**

The UPS's shipping materials have been designed with great care to provide protection whilst in transit. As these materials will be invaluable should you ever have to return the UPS for service, we would recommend that they be kept in a safe place for future use.

### **Intelligent microprocessor control**

The Proteq series is a line interactive UPS, based on a dual-microprocessor control system. This system has been designed utilising the newest technology providing high performance and powerful functions.

The Proteq series provides reliable AC power to the critical loads - protecting them from utility power blackout, swells, sags, surges and interference.

### **Advanced battery management**

The visual and audible indications provided by the Proteq UPS present the battery's status. The Proteq UPS is fitted with a self-test function, which will indicate any failures within the battery source requiring remedial works. The Proteq UPS will perform a self-test during initial start up procedures and can also be manually conducted via the ON/TEST switch at any time.

### **Interference**

There is no guarantee that interference to radio/TV will not occur in a particular installation. If this UPS causes interference to radio or television reception, which can be determined by turning the UPS off and on, the user is encouraged to try to correct the interference by one or more of following measures:

Connect the equipment to an outlet on a different circuit from the connected radio/TV.

Increase the separation between the equipment and the receiver.

# 1. Important Safety Instructions

**CAUTION: (UPS contains internal batteries):**

Risk of electric shock - Hazardous live parts exist within this unit, which are energised from the battery supply even when the input AC power is disconnected.

**CAUTION: (No user serviceable parts):**

Risk of electric shock - do not remove cover. No user serviceable parts inside. Refer servicing to approved, qualified service personnel only.

**WARNING (Fuses):**

To reduce the risk of fire, replace only with the same type and rating of fuse.

**WARNING:**

Installation is intended within a controlled environment.

**CAUTION:**

Do not dispose of the batteries in a fire, as they are liable to explode.

**CAUTION:**

Do not open or tamper with the battery, as released electrolyte can be harmful to the skin and eyes.

**CAUTION:**

A battery can present a risk of electric shock and high short circuit current. The following precautions should be observed when working on batteries:

- Remove watches, rings or other metal objects.
- Use insulated tools
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.

Disconnect charging source prior to connecting or disconnecting battery terminals

Servicing of the batteries should be performed by trained engineers only.

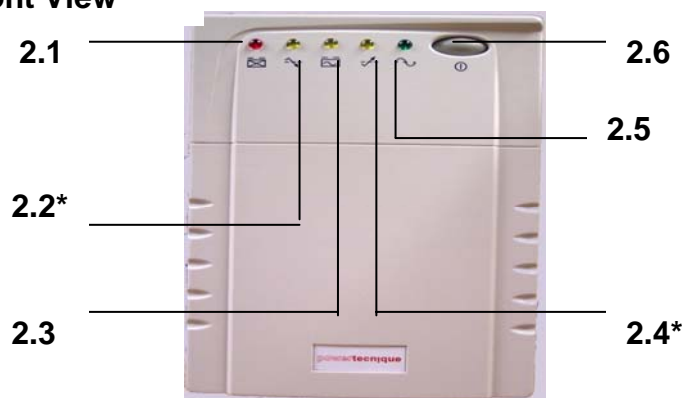
The correct procedure to de-energise the UPS system in an emergency is to press the OFF button until the UPS switches off and disconnect the input power from the mains supply.

## 2. Presentation

The Proteq is a standby uninterruptible power supply (UPS). When utility input is normal, the UPS provides surge protection and energy to charge the internal battery. If the utility input fails, the UPS supplies AC power to the load immediately.

- Utilises microprocessor based controls, minimising dependency on hardware. Maximises system flexibility and optimises reliability.
- Automatic frequency selection to match utility power.
- Uses a high quality battery charger to prolong battery's life and fully charge the battery.
- Overload protection both in line and battery mode.

### Front View



#### 2.1 REPLACE BATTERY indicator (red LED)

The LED illuminates when the battery needs replacing

#### 2.2 VOLTAGE REDUCTION indicator (yellow LED)\*

The LED illuminates when the UPS is correcting a high utility voltage condition. The loads receive normal power.

#### 2.3 BACKUP indicator (yellow LED)

The LED illuminates when the power is supplied from the batteries.

#### 2.4 VOLTAGE BOOST indicator (yellow LED)\*

The LED illuminates when the UPS is correcting a low utility voltage condition. The loads receive normal power.

#### 2.5 LINE NORMAL indicator (green LED)

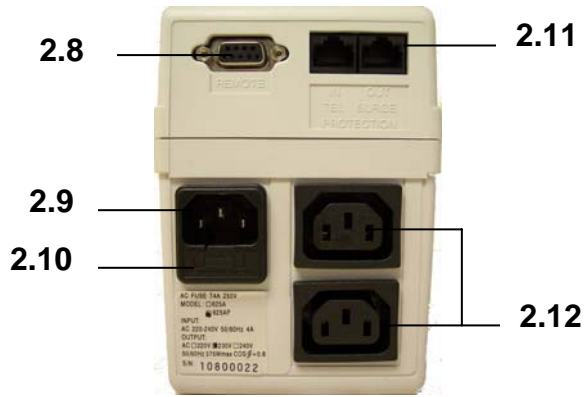
The LED illuminates when the input voltage is normal.

#### 2.6 ON/OFF/TEST/SILENCE button

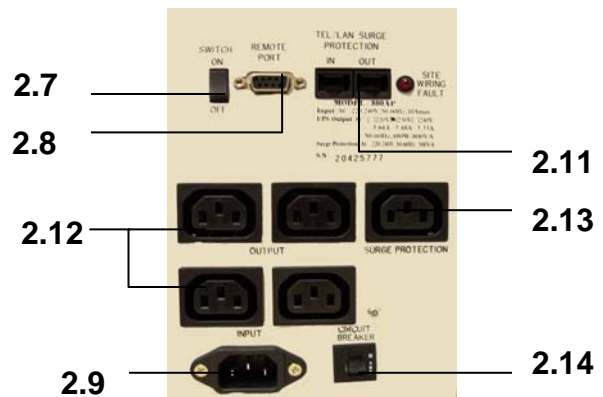
Press and hold the button until the "beep" stops to turn the UPS ON or OFF. Press and hold the button for less than 1 second to activate the UPS self-test or to silence the backup alarm.

\*(1000VA - 3000VA models only)

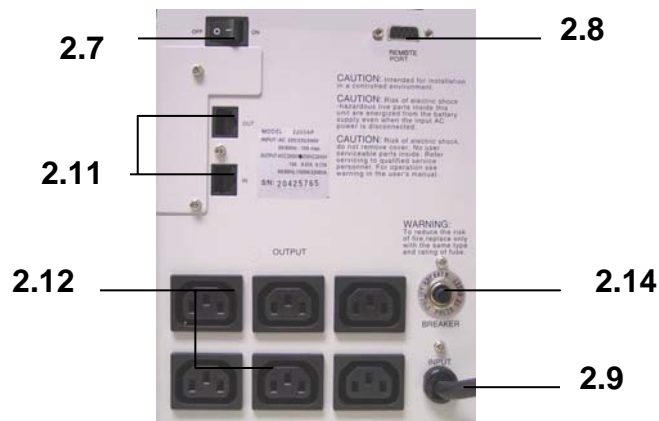
**Rear Views**



**625VA (230v)**



**1000VA - 1500VA (230v)**



**2000VA / 3000VA (230v)**

## **2.7 MAIN SWITCH**

## **2.8 REMOTE PORT/COMPUTER INTERFACE**

Provide both RS-232 and relay signal to support NOVELL, UNIX, DOS, WINDOWS and other operating systems.

## **2.9 AC INPUT POWER SOCKET**

## **2.10 INPUT FUSE**

(625VA-625VA models only)

## **2.11 TEL./MODEM port**

The telecom port allows the user to protect sensitive telecommunication equipment from phone line surges.

**\*Caution:** Use only Powertecnicque supplied or authorised UPS cables.

## **2.12 UPS OUTPUT SOCKETS**

The UPS output sockets continue to provide the correct AC voltage even when the utility power fails.

## **2.13 SURGE PROTECTION OUTPUT POWER SOCKETS**

(1000VA - 1500VA models only)

The battery does not support the surge protection output power socket when the utility power fails.

## **2.14 INPUT CIRCUIT BREAKER**

This trips when the connected loads exceed the protected socket's capacity, the center plungers of the circuit breakers extend when tripped.

## 3. Installation

Please inspect the UPS upon receipt. The packaging is recyclable and should be kept for future use or disposed of properly.

### 3.1 Positioning of the UPS

Install the UPS in a protected environment. It must be free of excessive dust and have adequate airflow. Do not operate the UPS where the temperature and humidity is outside the specified limits.

### 3.2 Battery charging

The battery is fully charged before the UPS is shipped from the factory. However it is recommended that the battery is recharged for at least six hours before use. To recharge the battery, simply plug it into an AC outlet. To maintain optimal battery condition, make sure that the UPS is always plugged in.

### 3.3 Connect to utility

Check that the UPS input voltage is 230v. The power cable supplied should be plugged into the AC input power socket and into a 13-amp socket.

### 3.4 Connect the loads

Plug your primary equipment (e.g. computer, monitor and critical data storage device etc.) to the battery power-supplied outlets. Plug your peripheral equipment (e.g. printer scanner, fax or audio device) in the full time surge protection outlets.

**\*Caution:** It is recommended that laser printers and plotters are not connected to the UPS system as they can periodically draw significantly more power during start up which may cause an overload condition.

### 3.5 Connect the telephone

To provide the Tel/Modem with surge protection, connect the telephone cable from the wall outlet to the IN jack. Connect the telephone cable (provided) from the OUT jack to the fax or modem.

### 3.6 UPS self-test

The UPS will conduct a self-test when switched on.

**Caution:** Do not add or remove any equipment while the UPS conducts a self-test, wait until the power indicator lights up. Switch on equipment after your have switched on the UPS.

### 3.7 Extension battery packs

The expected battery life is 3 to 5 years depending on the environment and ambient temperature.

To install the battery cabinet, firstly switch off the UPS and remove the connector metal cover from the back panel of UPS. Connect the battery cabinet's D.C. cable to the UPS and clamp the plug in place using the clamps supplied.

\*A maximum of four battery packs can be connected together to provide extra autonomy.

Connect the power cable supplied into the AC input power socket and a 13-amp socket. Finally switch on the UPS and plug the loads into the back of the UPS.

**Note:** The extension battery packs can be charged via the UPS or to reduce charging time, the battery packs can be charged individually using the rear AC input and a power cable plugged into the utility power.

**CAUTION:** When connecting external battery packs please ensure that you only connect black connections to black and red connections to red.

## 4. Operation

### 4.1 Check the power requirement of your equipment

4.1.1 Make sure the total power of your equipment does not exceed the rating capacity.

4.1.2 Check that the equipment plugged into the battery power-supplied outlet does not require total power exceeding the capacity of the UPS. Otherwise overload may occur and cause the circuit breaker to trip. You can convert Watts (W) or Amps (A) into VA by doing the following calculations.

220-240V model      \_\_Watt (W) x 1.67 = \_\_ VA, or \_\_ Amps (A) x 230 = \_\_ VA

### 4.2 Switch on

With the utility input power connected to the UPS, switch on using the ON/OFF switch on the back of the UPS, then press the ON button on the front of the UPS, keeping it pressed until the "beep" stops. After which, loads can be connected to the UPS.

**Attention:**      Press for 1 second for normal power on.  
                         Press for more than 3 seconds until double beep sound to disable the NO LOAD SHUTDOWN function and turn on the UPS.

**Attention:**      During power failure, the UPS will turn off automatically if none of the connected loads are operating, NO LOAD SHUTDOWN function.

**Attention:**      If the utility power is unavailable, the UPS system can be cold started, using its internal battery. To cold start the system, press and hold the ON button until the "beep" stops.

### 4.3 Simple test

It is recommended that the user perform a simulation test when using the UPS for the first time or adding an additional piece of equipment. To conduct a simulation-test: first, switch on the UPS and wait for the power indicator to light up, then simply unplug the UPS to simulate the event of a power failure.

### 4.4 Switch off

By pressing the power switch until the "beep" stops.

Note: if the utility power is available and connected the UPS will automatically charge its batteries whilst in OFF mode, Advanced battery management technology.

### 4.5 Silence

When the UPS system is in the ALARM mode, press the SILENCE button for 1 second to silence the audible alarm. (This function is disabled when the UPS system is under a LOW BATTERY or OVERLOAD condition).

#### **4.6 Self test function**

Activate by pressing the TEST button for 1 second.

#### **4.7 Auto restart feature**

The UPS is equipped with an auto restart feature. It will activate when there is no utility power and the battery level becomes too low to sustain its operation. The UPS will automatically switch to standby mode until the utility power returns and it can recharge its battery.

#### **4.8 Overload protection**

If an overload situation is detected, an audible alarm will sound, emit a long beep and automatically shut down the system. Unplug at least one piece of equipment from the battery-supplied outlets. Switch off the UPS, wait 5 seconds, check that the circuit breaker is set and switch on again.

#### **4.9 Self protection feature**

The UPS is programmed so that once switched off, the UPS user will have to wait 5 seconds until the UPS can be switched on again, preventing damage to the unit.

## 5. Alarms

### 6.1 BACKUP (slow alarm)

When the UPS is working in BACKUP mode, the UPS will emit an audible alarm. The alarm stops when the UPS is returned to LINE mode operation.

**Attention:** The BACKUP audible alarm will sound every two seconds. (Slow-speed beep).

**Attention:** The UPS system provides a mute function for this condition. When the beeping sound occurs, pressing ON will silence the alarm; pressing ON again will once again sound the alarm.

### 5.2 LOW BATTERY (rapid alarm)

If the battery capacity should become too low (about 20% - 30%) whilst in the BACKUP mode the UPS system will emit an audible alarm. When the battery has discharged to a pre-set level the UPS system will automatically shutdown.

**Attention:** The LOW BATTERY alarm will sound twice per second. (Fast-speed beep).

**Attention:** The LOW BATTERY alarm cannot be silenced.

### 5.3 OVERLOAD (continuous alarm)

When the connected load exceeds the maximum rated capacity, the UPS will emit a continuous alarm to warn of an overload condition. In order to protect the unit and the loads, the UPS will automatically turn off. To eliminate the overload alarm disconnect non essential devices from UPS.

## 6. Software Options & Computer Interface Port

### 6.1 Power monitoring software

The UPS-MON series software (or other power monitoring software) is a standard RS232 interface used to perform monitoring functions, and/or orderly shutdowns of computer systems in the event of prolonged power failures. The UPS-MON can also be used to remotely monitor the UPS Voltage, Frequency, Battery level etc. The software is available for most operating platforms such as Windows 3.1x, Windows 95, Windows NT, Novell NetWare etc. For further details please contact the Powertecnicque sales department.

### 6.2 Interface kits

Additional interface kits for the UPS system are available on request, subject to specification.

**Caution:** Only factory supplied interface kits should be used with the UPS system.

### 6.3 The characteristics of computer interface port

The computer interface port has the following characteristics:

The communication port on the back of the UPS system may be connected to a host computer. This port allows the computer to monitor the status of the UPS and control the operation of the system in some cases. Its major functions normally include some or all of the following:

- To broadcast a warning that the utility power has failed.
- To systematically shutdown any open files.
- To turn the UPS system off.

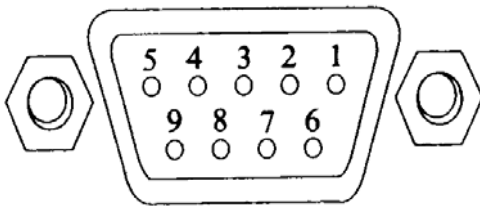
## 6.4 Computer interface port pin out configuration

The pin out configuration of the interface port is as follows:

- 6.4.1 Pins 5 and 2 are open collector outputs that must be pulled up to a common referenced supply no greater than +40VAC. The transistors are capable of a maximum non-conductive load of 25mA DC. Pin 7 only should be used as the common.
- 6.4.2 Pin 5 generates a High to Low signal when the internal battery has less than 5 minutes autonomy time left.
- 6.4.3 Pin 2 generates a High to Low signal when a mains failure condition is present.
- 6.4.4 The UPS will shut down when a high RS232 level is sustained on pin 6 for >0.36 seconds.
- 6.4.5 Pin 9 is the RS232 data output.
- 6.4.6 Pin 6 is RS232 data input (RxD)

NOTE:

- 1. Switch rating +40V, 0.15A non-inductive.
- 2. Pin 7 should be connected to ground only.



## 6.5 Communicating Interface Port

A standard RS232 serial port is available on the rear panel of UPS. The serial port provides various signals as explained below:

Pin#	Function	I/O
2	Power Failure - normally open status which will become closed during active	OUTPUT
4	Reference GND for pin 2 & 5	OUTPUT
5	Battery Low - normally open status which will become closed during active	OUTPUT
6	Remote shutdown UPS - keep this pin at high voltage (+5V to +12V) 500ms to shutdown UPS. Available whilst in battery mode	INPUT
7	Reference GND for pin 6	INPUT

## 7. Maintenance & Storage

### 7.1 Maintenance

- 7.1.1 The unit should be kept clean.
- 7.1.2 The unit should be wiped clean with a soft damp cloth.
- 7.1.3 The UPS connections should be regularly inspected.
- 7.1.4 The UPS should not be used on uneven surfaces.
- 7.1.5 The UPS system should be positioned with at least 10cm of clearance between the rear panel and the wall. The ventilation intake areas should be clear at all times.
- 7.1.6 Avoid direct sunlight, rain and high humidity.
- 7.1.7 The UPS unit should be positioned away from open fires and extremely hot environments.
- 7.1.8 Materials should not be stacked on top of the UPS unit.
- 7.1.9 The unit should not be exposed to corrosive air.
- 7.1.10 The normal operating temperature of the UPS unit is between 0-40°C.

### 7.2 Storage conditions

The UPS system should be stored upright in a cool and dry location, with its battery fully charged. Before storing the battery should be charged for at least 4 hours.

### 7.3 To extend the storage

Where the ambient temperature of the environment is between -15 to +30°C the batteries should be charged every 6 months.

Where the ambient temperature of the environment is between +30 to +45°C the batteries should be charged every 3 months.

## 8. Warranty

All Powertecnicque UPS systems have been designed and manufactured to the highest standards. Each unit and all its components have been extensively tested and Powertecnicque guarantees that your UPS is free from manufacturing defects for a period of 24 months as of purchase.

The Powertecnicque warranty covers the replacement or the repair of components where a manufacturing defect has occurred. To benefit from the repair warranty, the fault should be reported to our Powertecnicque customer service department.

When reporting a fault, please include the following information:

- Order number
- Date of purchase
- Name and address of installation
- Contact name, address and telephone number
- Model of the faulty UPS
- VA rating
- Serial number
- Fault symptoms

Once this information has been provided you will be allocated a call log number. Shortly afterwards you will be contacted by one of our services engineers, who will then provide the necessary support.

The warranty does not apply:

- to products which have been misused; mishandled; modified; damaged by act of God or any other sources external to the product; repaired by others or whose serial number has been removed or altered.
- to replacement or extension of warranty when assistance has previously been given.
- to claims for damages whether direct or indirect of any nature whatsoever to persons, animals and things during the use or non-use of the equipment.

### Contact details

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<b>International sales</b>	Telephone	+44 (0) 1489 560700
	Fax	+44 (0) 01489 560742
	Email	international@powertecnicque.com

## Appendix A Troubleshooting

The UPS has a self-protect feature that prevents the UPS from being damaged as a result of overheating. If the temperature is higher than 55°C, wait for a while and let the UPS cool down

Problems	Possible reasons	Solutions
UPS will not operate after pressing On/Off switches  No lights on, no warning sounds	Incorrect input power supply	Check input power supply
	Battery voltage is less than 10V	Recharge the UPS for a minimum of 6 hours
	Time of pressing the ON/OFF/TEST/SILENCE button is too short	Press and hold the ON button for more than 1 second
	The load is less than 15W during power failure	Normal condition No load shutdown function is active (see 4.2)
	PCB failure	Contact the Powertecni <sup>q</sup> ue service department for assistance
UPS always at back-up mode	Power cable loose	Ensure power cable is plugged in correctly
	AC fuse blown	Replace the AC fuse in the plug
	Line voltage too high, too low or black out	Normal condition
	PCB failure	Contact the Powertecni <sup>q</sup> ue service department for assistance
Audible alarm continues to sound	Overload	Remove non essential output equipment
Battery autonomy is too short	Batteries haven't been charged UPS overload Batteries require investigation	Keep the UPS connected to the utility power for over 6 hours to ensure that the batteries are fully charged. Check that the UPS system is not overloaded and remove any non essential equipment, if necessary
	The charger is faulty	Contact the Powertecni <sup>q</sup> ue service department for assistance
	Full-time Surge Protection outlets stop providing power to the equipment	Circuit breaker button popped up as a result of overload

## Appendix B Specifications

Model		PRO625
	Power rating VA / W	625VA/375W
	Power factor 100% load	0.6 (375W)
	Power factor 50% load	0.6 (187W)
Input	Voltage	100V, 110V, 115V, 120V, 220V, 230V 240V +/- 25% at line input
	Frequency	50 or 60Hz +/- 10% (auto sensing)
Output	Voltage (on battery)	Simulated sine wave 230V, +/-5%
	Frequency (on battery)	50 or 60Hz +/- 0.3Hz
	Auto Voltage regulation (AVR Function)	AVR automatically increases output voltage 15% if -9% to -25% of nominal. AVR decreases output voltage 13% below input voltage if +9% to +25% of nominal
	Transfer Time	2/4 milliseconds, including detection time
Protection and filtering	Spike Protection	180-1080 joules (optional),
	Overload Protection	UPS automatic shutdown if overload exceeds 110% of nominal input for 60 seconds and 130% for 3 seconds
	Unit Input	Fuse for overload & short circuit protection
	Short Circuit	UPS output shuts off immediately or input fuse ruptures
Battery	Type	Sealed, maintenance-free lead acid
	Typical Recharge Time	6 hours (to 90% of full capacity)
	Backup Time (minutes) (PC with 15" monitor)	15-30 minutes
Physical	Net weight Kg (lbs.)	6.5(14.3)
	Dimension (mm) WxDxH	97*265*135/ 3.8"*10.4"*5.3"
	Input Socket	IEC 320 power inlet
	Output Sockets	IEC320 female appliance coupler (220V)
Alarm	Battery Backup	Slow beeping sound (once per 2 seconds)
	Battery Low	Rapid beeping sound (once per 0.5 second)
	Overload	Continuous beeping sound
Environment	Ambient operation	3,500 meters max. elevation, 0-95% humidity non-condensing, 0-40 °C
	Audible Noise	<40dBA(1 meter from surface)
	Storage condition	15,000 meters max.

MODEL			PRO1000	PRO1200	PRO1500	PRO2000	PRO3000
INPUT	Capacity	(On Battery)	1000VA/600W	1200VA/720W	1500VA/900W	2000VA/1200W	3000VA/1800W
		(Spike protection)	500VA	500VA	500VA	500VA	500VA
	Voltage		+/-25% at line input				
	Frequency		50 or 60 Hz +/-10% (auto sensing)				
OUTPUT	Voltage (on battery)		Simulated sine wave at 100V/115V/230V +/- 5%				
	Frequency (on battery)		50 or 60 Hz +/- 0.5%				
	Voltage Regulation (AVR)		AVR automatically increase output voltage 15% above input voltage if -9% to -25% of nominal. AVR decrease output voltage 13% below input voltage if +9% to +25% of nominal				
	Transfer Time		2/4 milliseconds, including detection time				
PROTECTION And FILTERING	Spike Protection		320 Joules, 2ms				
	EMI/RFI filter		10Db at 0.15MHz, 50Db at 30MHz				
	Overload Protection		UPS automatic shutdown if overload exceeds 110% of nominal at 60 seconds and 130% at 3 seconds				
	Unit Input		Circuit Breaker	Circuit Breaker	Circuit Breaker	Circuit Breaker	Circuit Breaker
			For overload & Short circuit protection				
	10Base-T Cable Port		Network (UTP,RJ-45) compatible jacks				
Short Circuit		UPS output cut off immediately or input fuse protection					
BATTERY	Type		Sealed, Maintenance-free lead acid				
	Typical Recharge Time		4 hours (to 90% of full capacity)				
	Protection		Automatic self-test & discharge protection, Replace battery indicator				
	Back-up Time		3- 180 min (depending on computer load)				
PHYSICAL	Weight Kg (lbs)		15.0 (33.0)	15.5 (34.1)	15.8 (34.8)	28.9 (63.58)	29.8 (65.6)
	Dimension (mm) W*D*H		130*382*201 (5.1"*15"*7.9")			169*438.5*215 (6.7"*17.3"*8.5")	
ALARM	Battery Back-up		Slow beeping sound (about 0.47Hz)				
	Battery Low		Rapid beeping sound (about 1.824Hz)				
	Overload		Continuous beeping sound				
INTERFACE	Dry Contact ( DB9 ) Interface		YES	YES	YES	YES	YES
	RS-232C Interface		YES	YES	YES	YES	YES
ENVIRONMENT	Ambient Operation		3,500 meters max. elevation, 0-95% humidity non-condensing, 0-40 deg C				
	Audible Noise		< 40dBA (1 meter from surface)				
	Storage Condition		15000 meter max.				

### Extended Battery UPS Options

MODEL		PRO1000B	PRO2000B
INPUT	Capacity (On Battery)	1000VA/600W	2000VA/1200W
	Voltage	+/-25% at line input	
	Frequency	50 or 60 Hz +/-10% (auto sensing)	
OUTPUT	Voltage (on battery)	Simulated sine wave at +/- 5% of nominal	
	Frequency(on battery)	50 or 60 Hz +/- 0.5%	
	Voltage Regulation (AVR)	AVR automatically increase output voltage 15% above input voltage if -9% to -25% of nominal. AVR decrease output voltage 13% below input voltage if +9% to +25% of nominal	
	Transfer	2/4 milliseconds, including detection time	
PROTECTION And FILTERING	Spike Protection	320 Joules, 2ms	
	EMI/RFI filter	10dB at 0.15MHz, 50db at 30MHz	
	Overload Protection	UPS automatic shutdown if overload exceeds 110% of nominal at 60 seconds and 130% at 3 seconds	
	Unit Input	Circuit Breaker for overload & Short circuit protection	
	10Base-T Cable Port	Network (UTP,RJ-45) compatible jacks	
	Short Circuit	UPS output cut off immediately or input fuse protection	
BATTERY	Type	Sealed, Maintenance-free lead acid	
	Typical Recharge Time	4 hours (to 90% of full capacity)	
	Protection	Automatic self-test & discharge protection, Replace battery indicator	
	Charger Circuit	0.6A	0.8A
	Build in Battery	12V 7Ah*2	12V 7Ah*4
PHYSICAL	Net Weight Kg (lbs)	19.8 (43.56 lb)	28.9 (63.58 lb)
	Shipping Weight Kg (lbs)	21 (46.2 lb)	31.4 (69.08 lb)
	Dimension (mm) W*D*H	130*382*201 (5.1"*15"*7.9")	169*438.5*215 (6.7"*17.3"*8.5")
	Input Inlet	IEC 320 power inlet	
	Receptacles	NEMA 5-15R(115V) / IEC 320 female appliance coupler(230V)	
	ALARM	Battery Back-up	Slow beeping sound (about 0.25Hz)
Battery Low		Rapid beeping sound (about 1.00Hz)	
Overload		Continue beeping sound	
INTERFACE	Dry Contact	AC fail. battery low. shutdown signal	
	RS-232 Interface	Bi-directional communication port	
ENVIRONMENT	Ambient Operation	3,500 meters max. elevation, 0-95% humidity non-condensing, 0-40 deg C	
	Audible Noise	< 40dBA (1 meter from surface)	
	Storage Condition	15000 meter max. elevation	