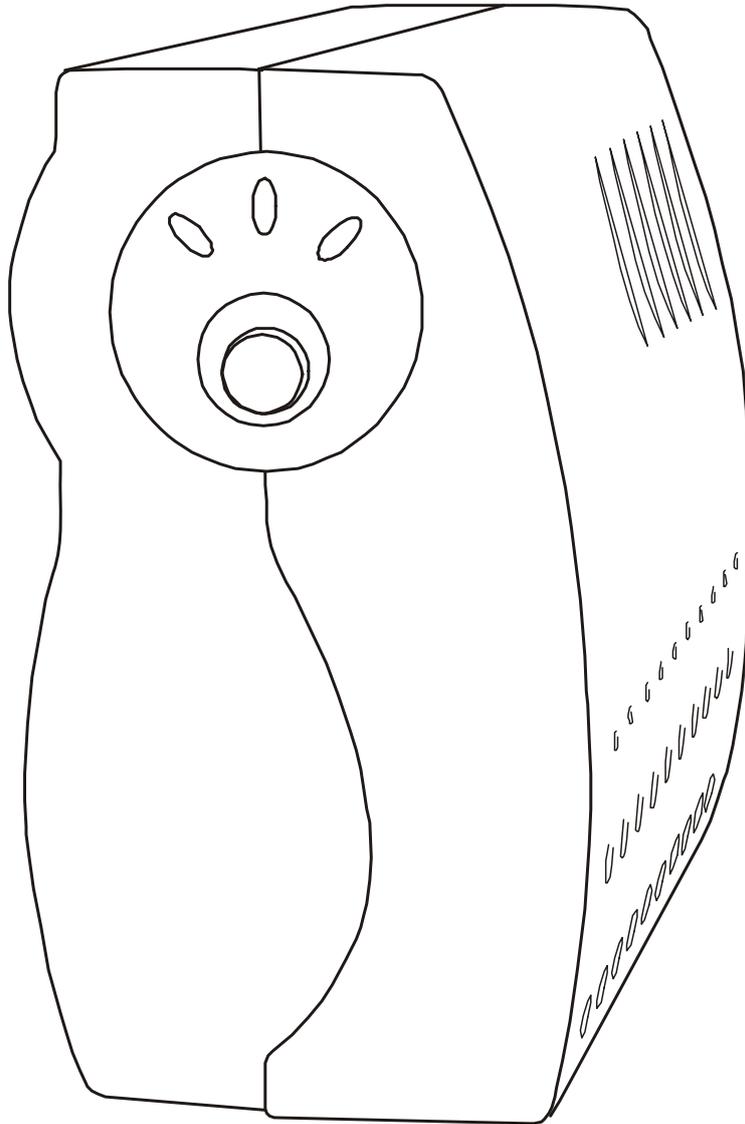


# Uninterruptible Power Supply

## Line Interactive UPS



# User's Manual

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# 1. Overview

## 1-1 Introduction

Line Interactive UPS offers excellent protection for PC, Networking workstation and small internet-working Devices. The system built in line conditioning known as AVR (Auto-Voltage regulation) the ideal device to protect your PC against all power disturbance including power blackouts, Surge and Sag.

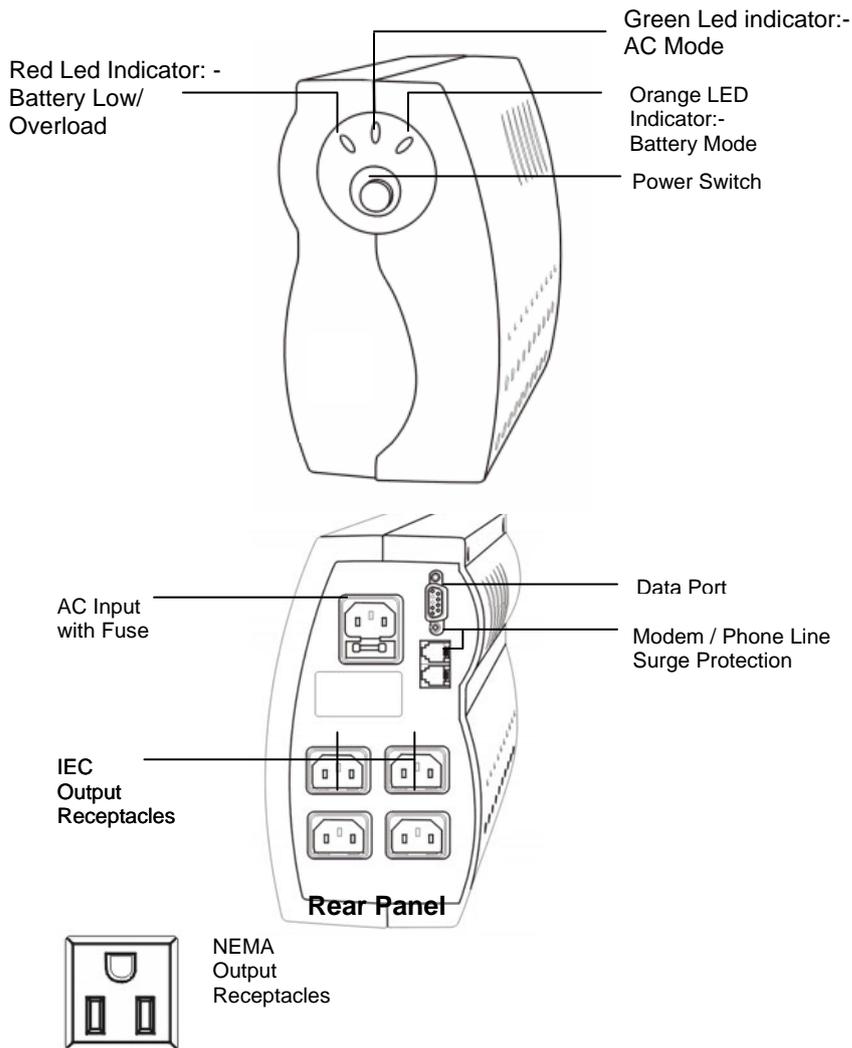
With MicroProcessor inside the **SMART UPS** not just work hard but work smart and to Protect your document save into PC.

### SPECIFICATIONS:

TECHNOLOGY	Line Interactive UPS with Smart Microprocessor Control				
CAPACITY	VA / Watts	500VA / 255W	750VA / 375W	1000VA / 500W	1200VA / 600W
INPUT	Nominal Voltage	120 VAC or 230VAC Systems			
	Voltage Range	85VAC~145VAC/ 175VAC~285VAC			
	Frequency	50Hz or 60Hz Auto-Sensing			
OUTPUT	Voltage (Batt.Mode)	120 VAC or 230VAC ±10%			
	Frequency	50Hz or 60Hz ±0.5Hz			
	Built-in AVR	Boost & Buck			
	Waveform	Modified Sinewave			
	Transfer Time	< 10 milliseconds			
	Outlets	4 NEMA 5-15R or 4 IEC			
BATTERY	Type	Sealed Lead Acid Maintenance-Free			
	Capacity	12V/ 4.5Ah x 1pc	12V/ 7Ah x 1pc	12V/ 7Ah x 1pc	12V/ 9Ah x 1pc
	Recharge Time	4 Hours to 90% After Complete Discharge			
	Protection	Over Discharge Protection			
PROTECTION	Spike	For 120VAC: 40 Joules over 2ms, For 230VAC:80 Joules over 2ms			
	Unit Input	Fuse for Overload and Short Circuit Protection			
	Overload	UPS will Alarm if Overload over 110% and will Immediately Shutdown if Overload over 150%			
	Short Circuit	Input Fuse Protection. UPS Output will Cut Off immediately.			
ALARM	Battery Back Up	Alarm will Beep every 4 Seconds			
	Battery Low	Alarm will Beep every Second			
	Overload	Alarm will Beep continuously			
INDICATORS	Green LED	Power On - Normal			
	Red LED	Battery Low - Overload			
	Yellow LED	Battery Mode			
FUNCTIONS	Frequency Auto-Sensing	YES			
	Synchronization Transfer	YES			
	Cold Start Function	YES			
	Auto Restart UPS	YES			
	Green Mode	YES			
OPTIONAL FEATURES	Tel/Modem Protection	RJ-11			
	Interface	True RS-232 or USB			
	Software	UPSmart for Windows (95, NT4.0, 98SE, ME, 2K, XP, Server2003, Vista); Linux (Redhat 7.0~7.3 & Mandrake 8.2); Novell (4.X & 5.1)			
ENVIRONMENT	Altitude	< 5000 Meter			
	Temperature	0°C ~ 40°C			
	Humidity	0% ~ 90% (Non-Condensing)			
	Audible Noise	< 40dB at 1 meter			
DIMENSIONS	D x W x H (mm)	275 x 110 x 202			
WEIGHT	Net Weight	4.40Kgs	5.30Kgs	5.90Kgs	6.40Kgs

\* Specification Subject to Change Without Prior Notice

## 1-2 System Description



1. Full digital microprocessor controlled
2. Power saving and sleeping mode
3. Boost and busk AVR (Auto Voltage Regulation)
4. Smart communication port (True RS-232)
5. Fax/Modem/Network surge suppression
6. 50/60Hz auto detecting
7. Cold start function (DC power on)
8. Short Circuit and overload protection
9. Automatic diagnostics & battery check while power on
10. Attractive smart color combination
11. Elegant outlook for both vertical and horizontal positioning

## **2. INSTALLATION AND OPERATION**

### **2-1. Installation**

The following steps explain how to install the UPS to your PC.

Step 1. Assure AC power source output voltage is in the UPS

Require range which specify on the rear panel.

Step 2. Plug the UPS power cord into a wall outlet or other

Power source.

Step 3. Plug the personal computer (PC) into the UPS output.

Step 4. Start the UPS by pressing the ON/OFF button for t

4 seconds. After the UPS turn on, it conducts a self-test

and enters Normal AC power mode. The AC power green

LED indicator illuminates indicating that power is available

From the rear receptacles.

Step 5. Shutdown the UPS by pressing ON/OFF button for 6 seconds

Till Red LED indicator illuminate.

### **2-2. OPERATION**

#### **2-2-1. Turning the UPS ON**

Press the power ON/OFF on the front panel. After the UPS green LED is turned on. It conducts a self-test and enters normal mode.

#### **2-2-2. Starting the UPS on battery**

To turn on the UPS without using AC power. Press ON/OFF button and Hold for 6 seconds to conserve battery power (The UPS does not conduct Self-test when UPS start on battery).

#### **2-2-3. Turning The UPS OFF**

Press the power ON/OFF on the front panel when UPS power off. It would Not in standby mode.Indicator

### 3. LED and Alarm Indication:

#### 3-1. LED indication

GREEN	ORANGE	RED
AC power mode (UPS ON)	AC power failure and Switch to batter mode	UPS fault overload

#### 3-2. Alarm indication

Beep Every 4 seconds	Beep Every 1 Second	Beep Continuously	Beep Every 0.5 second
UPS runs on battery Mode. Press ON/OFF button for 6 seconds to stop Beep	Low battery Warning	Battery overload warning	Battery Low

### 4. CAUTION

Although your UPS has been designed and manufacturer to assure personal safety, improper use can result in electrical shock or fire. To assure safety, please observe the following rules:

1. Turn off and unplug your UPS before cleaning. Do not use liquid or aerosol cleaner. A dry cloth is recommended dust from the surface of your UPS.
2. Do not install or operate your UPS in near water
3. Do not place UPS on an unstable cart, stand or table
4. Do not place UPS under direct sunlight or close to heat emitting source
5. Do not place UPS power cord in any area where it may get damaged by heavy objects.
6. Do not connect UPS to home appliance **e.g. hairdryer, fan etc.**
7. Do not connect UPS to **Laser printer**
8. If you store the UPS or UPS does not operate for a long period, recharge the battery every month by starting the UPS for 8 hours.
9. Replace the battery with the same number and type of batteries as originally installed in the UPS. The UPS must **be** unplugged from the AC power source before replacing batteries (this operation require specialistic staff)

## 5. TROUBLE SHOOTING

Situation	Check items	Solution
UPS power is on but UPS does not start	The line cord is not connected Or not plugged in. The wall outlet is dead	Connect the line cord to the UPS and plug the UPS into a working outlet
Start UPS but red LED flash	Low battery power because of long term AC power failure	When AC power in normal condition Execute battery charge for 8 hours
UPS does not provide the expected back-up time	The battery may be low power because <ol style="list-style-type: none"><li>1. Long-term storage</li><li>2. Overload</li><li>3. End of battery life</li></ol>	<ol style="list-style-type: none"><li>1. Charge the battery for 8 hours</li><li>2. Turn off connected applications</li><li>3. Replace the battery</li></ol>
Red LED illuminates and alarm Continuonos beeping	UPS fault	Unplug the UPS from wall outlet and Unplug the UPS from wall outlet and

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This manual is subject to changes without notice.