**CAUTION!** If the UPS is with metal chassis, for safety purpose, grounding is a must during UPS installation in order to reduce leakage current below 3.5mA.

Attention Hazardous through electric shock. Also with disconnection of this unit from the mains, hazardous voltage still may be accessible through supply from battery. The battery supply should be therefore disconnected in the plus and minus pole at the quick connectors of the battery when maintenance or service work inside the UPS is necessary.

**CAUTION!** Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

CAUTION! When replacing the batteries, use the same number and type of batteries. CAUTION! Internal battery voltage is 12V dc. Sealed, Lead-acid, 6-cell battery.

**CAUTION!** Do not dispose of batteries in a fire. The battery may explode. Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes.

 $\textbf{CAUTION!} \ \textbf{Unplug the UPS prior to cleaning and do not use liquid or spray detergent.}$ **CAUTION!** A battery can present a risk of electric shock and high short circuit current.

> The following precaution should be observed before replacing batteries: The following precaution should be observed before replacing batter 1) Remove watches, rings, or other metal objects.
> 2) Use tools with insulated handles.
> 3) Wear rubber gloves and boots.
> 4) Do not lay tools or metal parts on top of batteries.
> 5) Disconnect charging source prior to connecting or disconnecting batteries terminal.

### **Software Download & Installation** (Only for the model with communication port)

Please follow steps below to download and install monitoring software: I.Insert CD disk into computer, select installation icon and Follow the on-screen instructions to install the software.

2.Connect the UPS and computer with communication cable 3.Open the software, select proper port to monitor the UPS.

# **7** Maintenance

Preventative Maintenance ensures the longer service life of UPS. Please check the following things every month:

1.Make sure the airway not blocked:

1. Make Sure the airWay not blocked;
2. Make sure that the UPS surface is not covered by dust;
3. Check whether the input, output and battery connecting lines are firm or not and the insulation is effective or not;
4. Make sure that the UPS is not affected with damp;
5. Let the UPS work in battery mode for about 5 minutes and in this period, if there is no other alarm from the UPS, then the UPS is normal; if there is other alarm message, places corpact the local dealer for help. message, please contact the local dealer for help.

### Battery maintenance

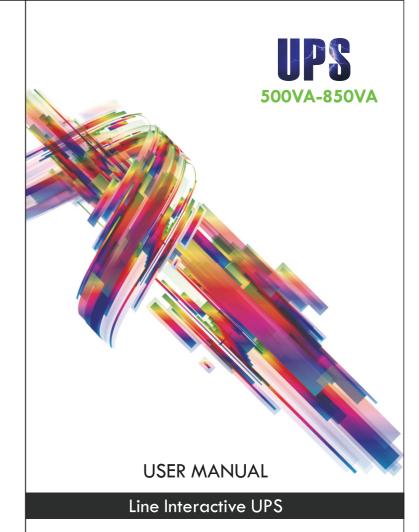
The UPS contains sealed lead-acid maintenance-free battery. The bad environment high discharging frequency, high temperature etc will dramatically reduce the service life of battery. The service life of battery will also reduce even it is not used. It is suggested to discharge the battery once every 3 months when AC is normal. When battery is near the end of its life, the battery will end in bad performance.

### **8** Trouble Shooting

ase the tuble below to solve minor problems.				
Phenomenon	Probably cause	Solution		
The mains is normal, but the UPS is in battery mode.	AC input fuse is broken	the fuse is placed with AC input of the UPS. After disconnecting the AC plug, put out the fuse and replace it with a new one.		
When AC fails, the computer doesn't work.	Battery low voltage.	Please turn on the UPS and charg the battery for at least 10 hours, when AC is normal and then turn on the UPS.		
When power fails, backup time is shorten.	The UPS is overload	Remove some critical load.		
	Battery voltage is too low	Charge UPS at least 8 hours.		
	Battery defect. It might due to high temperature operation environment or improper operation to battery.	Replace the battery with the same type.		

## Specifications

Model	500VA	600VA/650VA	700VA/750VA	800VA/850VA	
INPUT					
Voltage	100V/110V/120V/ or 220V/230V/240V				
Voltage Range	±25%(-35% optional)				
Frequency Range	50/60Hz±10%				
OUTPUT					
Power factor	0.6				
Voltage Regulation	±10%				
Transfer Time	≤10ms				
Waveform	Simulated sine wave				
BATTERY					
Type&Number	12V/7AH*1		12V/8AH*1		
Charging Time	8 hours recover to 90% capacity				
PHYSICAL					
Dimension (W*D*H)	185*280*95(mm)				
Net Weight (kgs)		4. 5Kg	4. 8Kg	5. 6Kg	
ENVIRONMENT					
Humidity	20%~90% RH @ 0~40℃(non-condensing)				
Noise Level	≤45dB(1m)				
MANAGEMENT					
USB/RS-232(Option)	Supports Windows 98/2000/2003/XP/Vista/2008/ Windows 7/Windows 8				



# **Line Interactive UPS 1** Package Contents You should have received following items inside of package: -Communication cable ,CD(only for the model with USB/RS232 port) **2** Product Introduction This UPS provides comprehensive protection in a small and economic package. the UPS is more compact and offers greater comprehensive power protection against surges and spikes. this UPS will continue providing stable power to connected equipment and enable to shutdown PC safely during power failure. Its embedded microprocessor controller guarantees high reliability and it's perfect for any home or small office application. **3** Product Overview 1. Green light--AC output indications, illume when the Mains power on. 2. Yellow light--AC input indications, illume when there is Mains input. 3. Red light--DC output indications. illume under inverter mode. 4 On/Off button 1. USB (optional) 2. RJ11(optional) 3. RS232 (optional)

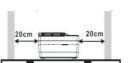
5. UPS surge protection

6. Surge protection

# Installation & Initial Startup

NOTE: Before installation, please inspect the unit. Be sure that nothing inside the

Placement & Storage Conditions
Install the UPS in a protected area that is free of excessive dust and has adequate air flow. Please place the UPS away from other units at least 20 cm to avoid interference. do not operate the UPS where the temperature and humidity is outside the specific limits. (Please check the specs for the limitations)







## best results, suggest to charge thebattery at least 8hours before initial use. The unit charges its battery while connectingto the utility.

Connect to the load Plug in the loads to output receptacles on the rear panel of the UPS. Simply turn on the power switch of UPS unit, then devices connected to the UPS will be protected by

CAUTION: Only bypass output can connect a laserprinte or scanner, otherwise it may cause the damage of the unit.

### Connect TEL/Modem/Fax for surge protection (Only for the model with RJ-11)

Connect a single modem/phone line into surge-protected "IN"outlet on the back panel of the UPS unit. Connect from "OUT" outlet to the computer with another phone line

Connect Communication Cable (Only for the model with USB/RS232 port) communication cable one end to the UPS/RS232 port and the other to the communication port of your PC. With the monitoring software installed, you can schedule UPS shutdown/start-up and monitor UPS status through PC.

Turn on the ups unit by pressing the power switch. Turn off the UPS unit by pressing again the power switch.

**Cold start Function**When the UPS is off and there is no power utility, it's still possible to cold start the ups unit to power the loads.

When AC fails, and the battery supplies power, UPS will alarm once every 6 seconds and the beep stops about 40 seconds later.
When battery is nearly used up, the UPS will alarm automatically and the beep When battery is really used up, the UPS will alarm for a very longtime and turn off

Battery over discharge protection: when the battery discharges and the UPS is in inverter mode, the battery will check and monitor the working status of the battery, when the battery voltage, drops to the limited lowest voltage, the inverter will turn off automatically and protect the battery; When AC comes back, UPS will turn on

Battery over-charge protection: When in AC mode, UPS automatically enter the charge mode, battery testing system will automatically detect the battery state of charge. When battery full completely, the charge will be automatically closed system to ensure that the service life of batteries, energy conservation.

Short circuit protection: When UPS in battery mode and there is shock or short-circuit, UPS will shut down automatically. (When in mains mode, the UPS will be protected by input fuse firstly and then transfers to the battery mode.)

Lock Phase
In AC mode, the UPS system automatically
tracks AC phase and ensures that the output wave form of the inverter is the same
with AC voltage wave form, in this way, it reduces the peak pulse and surge voltage
and minimizes the interference and damage to the equipment.

**Detective Input Frequency**When it is connected to AC, the frequency is automatically set to 50Hz or 60Hz in accordance with AC.

### **Important Safety Warning** (Save these instructions)

**CAUTION!** To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area free of conductive contaminants. (See the specifications for the acceptable temperature and humidity range.)

**CAUTION!** To reduce the risk of overheating the UPS, do not cover the UPS' cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heaters or furnaces.

CAUTION! Do not plug the UPS input into its own output. **CAUTION!** Do not allow liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.

**CAUTION!** Do not attach a power strip or surge suppressor to the UPS.

# 技术要求:

- 1、说明书为四色双面印刷;
- 2、所用纸张为157克双铜;
- 3、三折展开尺寸为: 300mm X 145mm
- 4、三折后成品尺寸为: 100mm X 145mm
- 5. 折叠方式为包折, 折完后第8、9点的表格参数为封底。

### 旧底图总号 数量 更改单号 签名 标记| 日期 何飞叶 底图总号 设计 2013/08/13 说明书 E. 53. 189SS10 核 排插式UPS 英文中性 阶段标记 共 16 张 签名 第1张 日期

说明书 500VA-850VA (第2版)

批准 格式 (4) 描图:

标准化

媒体编号

幅面: