## **Installation & Operation**

### Inspection

- The following items are inside the box:
  - ●UPS unit & User manual
- Remove the UPS from its package and inspect it for damage that may have occurred during shipping. If any damage is discovered, re-pack the unit and return it to the place of purchase.

### ■ Connect to Utility Power

 Connect AC power cord to utility power. Then, the UPS will start to charge inside battery. For best result, charge the battery for 6 hours prior to initial use.

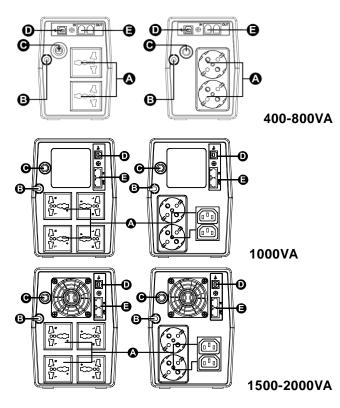
### ■ Plug in Equipment

- Plug your equipment to Battery Backup Outlets on the rear panel of the UPS.
- NOTE: Make sure that the UPS is powered on to protect all important devices from data loss during power failure.
- CAUTION: NEVER connect a laser printer or scanner to the battery backup outlets of UPS. The equipment may draw significantly power to overload the UPS.

### ■ Turn On/Off the UPS

 Please transport the UPS system only in the original package to protect against shock and impact.

## **Rear Panel**



A: Outlets
B: AC input
C: Fuse/Breaker
D: USB port
E: Surge protection

# **LCD Display**

**Operation Display** 

Operation	i Dispiay		
UPS	LCD	Description	
mode			
UPS Power on	SATTERYLOAD →  BBBBB  A  A  U  □  S  A  A	When UPS is powered on, it will enter this mode for 4 seconds.	
AC Mode	When AVR is functioning, icon will flash every second.	LCD information will be displayed in the following order when LCD is touched.  1.Output voltage 2.Input voltage 3.Load level 4.Battery capacity	
Overload in AC mode	icon will flash.	When overload occurs, alarm will beep every 0.5 second.	
Battery Mode	SON SATTERY When battery level is low, icon will flash.	Alarm will beep every 10 seconds and LCD information will be displayed in the following order when LCD is touched.  1.Output voltage 2.Input voltage 3.Load level	
0		4.Battery capacity	
Overload in battery mode	icon will flash.	When overload occurs, alarm will beep every 0.5 second.	

NOTE: If backlight shuts off, you may activate it by touching the screen.

#### Fault Code Table

Fault Code Table:				
Fault condition	LCD	Solutions		
Output short circuited	FO !	Disconnect short-circuited loads and restart the UPS again.		
Overload fault	F02 <sub>*</sub>	Disconnect all output loads and restart the UPS again.		
Overcharge	F03	Call for service immediately.		
Bad/severely discharged battery	FOY	Please replace the battery.		
High output voltage fault	FOS	Call for service immediately.		
Over- temperature	F05	Call for service immediately.		

If fault alarm occurs, please call for service immediately.

## Safety caution

- This UPS utilizes voltage that may be hazardous. Do not attempt to disassemble the unit. The unit contains no user replaceable parts. Only factory service personnel may perform repairs.
- This pluggable type A equipment with battery already installed by the supplier is operator installable and may be operated by lavmen.
- The mains socket outlet that supplies the UPS shall be installed near the UPS and shall be easily accessible.
- During the installation of this equipment it should be assured that the sum of the leakage currents of the UPS and the connected loads does not exceed 3.5mA.
- Connection to any other type of receptacle other than a two-pole, three-wire grounded receptacle may result in shock hazard as well as violate local electrical codes.
- In the event of an emergency, press the "OFF" button and disconnect the power cord from the AC power supply to properly disable the UPS.
- Do not allow any liquids or any foreign object to enter the UPS.
- Do not place beverages or any other liquid-containing vessels on or near the unit.
- This unit intended 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 excessive humidity.
- Do not plug the UPS input into its own output.
- Do not attach a power strip or surge suppressor to the UPS.
- Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS.
- Do not dispose of batteries in a fire as they may explode.
- Internal battery voltage is 12VDC.Sealed, lead-acid, 6-cell battery.
- A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries:
  - 1) Remove watches, rings, or other metal objects from the hands.
  - 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.
- Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.
- When replacing batteries, replace with the same number and type of sealed lead-acid battery.
- Do not open or mutilate the battery or batteries. Release electrolyte is harmful to the skin and eyes. It may be toxic.
- 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 connectors of the battery when maintenance or service work inside the UPS is necessary.
- 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 heater or furnaces.
- Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

### **Troubleshooting**

Problem	Possible Cause	Solutions	
Nothing is	The UPS is not	Press the power switch again to	
displayed on	on.	turn on the UPS.	
LCD panel.	Battery voltage	Charge the battery at least 6	
	is too low.	hours.	
	Battery fault.	Replace the battery.	
The UPS	Power cord	Re-plug the power cord.	
always on	loose.		
battery mode.			
The UPS	Please check	Please check the fault code for	
continuously	the fault code	the details.	
beeps.	for the details.		
Backup time	Battery voltage	Charge the battery at least 6	
too short.	is too low.	hours.	
	Overload.	Remove some unnecessary	
		loads. Before reconnecting	
		equipment, please verify that the	
		load matches the UPS capability	
		specified in the specs.	
	Battery defect.	Replace the battery.	

### **Specification**

#### 600VA/800VA

Model		iFP 600	iFP 800	
Capacity		600VA/	800VA/	
, ,		360W	480W	
Input voltage	220/230/240 Vac			
Input Voltage	140-290 Vac			
Range				
Output Voltage	± 10%(bat mode)			
Regulation				
Transfer Time	Typical 2-6 ms			
Waveform	Simulated Sinewave			
Battery Type		12V/7Ah	12V/9Ah	
Battery Number		1	1	
Charging Time	4 hours recover to 90% capacity			
Dimension(mm)	300 x 101 x 142			
Net Weight (kgs)		4.25	4.9	
Humidity	0-90% RH @ 0-40°C non-condensing)			
Noise Level	Less than 40dB			

<sup>\*</sup>Specifications are subject to change without notice.

#### 1000VA/1500VA/2000VA

Model	iFP 1000	iFP 1500	iFP 2000
Capacity	1000VA/	1500VA/	2000VA/
	600W	900W	1200W
Input voltage	220/230/240 Vac		
Input Voltage	140-290 Vac		
Range			
Output Voltage	± 10%(bat mode)		
Regulation			
Transfer Time	Typical 2-6 ms		
Waveform	Simulated Sinewave		
Battery Type	12V/7Ah	12V/9Ah	12V/9Ah
Battery Number	2	2	2
Charging Time	4-6 hours recover to 90% capacity		
Dimension(mm)	320 x 130 x 182		
Net Weight (kgs)	8.2	10.4	11
Humidity	0-90% RH @ 0-40°C non-condensing)		
Noise Level	Less than 40dB		

<sup>\*</sup>Specifications are subject to change without notice.