ION F15R 1RU
Line-interactive
650/1200/1600VA

User Guide

info@ionups.com.au
www.ionups.com.au
P: 1300 700 805

Contents

Installing your UPS System

ION F15R 1RU Line-interactive UPS 650/1200/1600VA

Unpacking

The box should contain the following:

(1) UPS Unit x1
(2) User Manual x1

How to determine the power requirements of your equipment

1. Ensure that the equipment plugged into the battery power-supplied outlets does not exceed the UPS unit's rated capacity. If rated unit capacities are exceeded, an overload condition may occur and cause the UPS unit to shut down or the fuse blow.
2. There are many factors that can affect the amount of power that your computer system will require. For optimal system performance keep the load below 80% of the unit's rated capacity.

Hardware Installation Guide

1. Your new UPS may be used immediately upon receipt. However, recharging the battery for at least 8 hours is recommended to ensure that the battery's maximum charge capacity is achieved. Charge loss may occur during shipping and storage. To recharge the battery, simply leave the unit plugged into an AC outlet. The unit will charge in both the on and off position.
2. With the UPS unit off and unplugged, connect the computer, monitor, and any externally powered data storage device.
3. Plug the UPS into a 2 pole, 3 wire grounded receptacle (wall outlet). Make sure the wall branch outlet is protected by a fuse or circuit breaker and does not service equipment with large electrical demands.
4. Depress the power switch to turn the unit on. The LCD indicator light will illuminate and the unit will "beep".
5. To maintain optimal battery charge, leave the UPS plugged into an AC outlet at all times.
6. To store your UPS for an extended period, cover it and store with the battery fully charged. Recharge the battery every three months to ensure battery life.

Routine Maintenance and Storage

Routine Maintenance

1. Use dry soft clothes to clean the front panel and plastic parts. Do not use any detergent that contains alcoholic ingredients.
2. The expected lifetime of the battery is around 3 years. Improper operation and harsh environment will reduce the actual lifetime.
3. Unplug the UPS from the power inlet if the UPS will not be operated for long periods of time.

Storage

1. First turn off your UPS and disconnect its power cord from the wall outlet. Disconnect all cables connected to the UPS to avoid battery drain.
2. The UPS should be stored in a cool dry location.
3. Make sure the battery is fully charged before the UPS is stored.
4. For extended storage in moderate climates, the battery should be charged for 12 hours every 3 months by plugging the power cord into the wall receptacle and turning on the main switch. Repeat it every 2 months in high temperature locations.

Important Safety Instructions

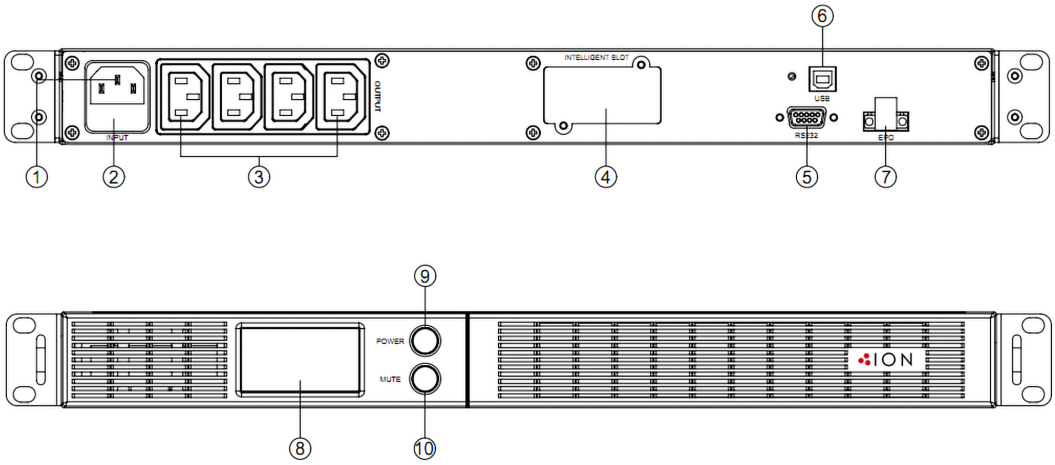
Save these Instructions

This manual contains important safety instructions. Please read and follow all instructions carefully during installation and operation of the unit. Read this manual thoroughly before attempting to unpack, install, or operate your UPS.

	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.)
	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.
	Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS.
	Do not plug the UPS input into its own output.
	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.
	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 attach a power strip or surge suppressor to the UPS.
	Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

Basic Operation

Front and Top Panel Description



ION F15R 1RU Line-interactive UPS
650/1200/1600VA

1. AC Inlet
Connect to utility power through the input power cord.

2. Input Circuit Fuse
The fuse provides optimal overload protection.

3. AC outlet
The UPS provides outlets for connected equipment to insure temporary uninterrupted operation during a power failure and against surges and spikes.

4. SNMP/HTTP Network Port
The SNMP/HTTP port provides remote monitoring and management of your UPS over a network.

5. Serial Port
This port allows connection and communication from the DB9 serial on the computer to the UPS unit. The UPS communicates its status to the software.

6. USB Port
This port allows connection and communication form the USB port on the computer to the UPS unit.

7. EPO Port
Enables an emergency UPS Power-Off from a remote location. EPO terminal open, the UPS will turn off and the output shutdown immediately.

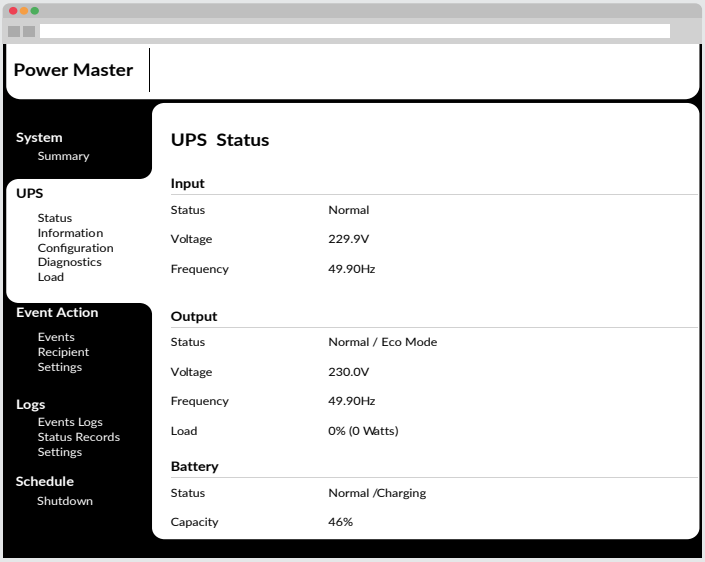
8. LCD Display
The LCD will display the UPS status including input voltage, output voltage, runtime, percentage of load and battery, etc.

9. Power On/Off Switch
Press the power switch to turn the UPS ON or OFF.

10. Mute Button
The audible alarm can be turned off/on by pressing this button.

Software Download

Power Master management software provides a user-friendly interface for your power systems. The graphic user-interface is intuitive and displays essential power information at a glance. Please follow procedures below to install the software.



INSTALLATION PROCEDURE:

1. Download Power Master from the website: http://www.powermonitor.software/
2. Double-click the file and follow the installation steps.
3. When your computer restarts, the Power Master software will appear as a blue icon located in the system tray.

Technical Specifications

Front and Top Panel Description

	F15R-650	F15R-1200	F15R-1600
OUTPUT			
Output power capacity	390W/650VA	720W/1200VA	960W/1600VA
Max Configurable Power (Watts)	390W/650VA	720W/1200VA	960W/1600VA
Output voltage		220-240Vac	
Boost Ratio(AVR)		118%	
Buck Ratio(AVR)		85%	
Ac voltage regulation(batt.mode)		±10%	
Frequency Range(batt.mode)		50/60±1% Hz	
Transfer time		4ms typical	
waveform (batt.mode)		Pure Sine Wave	
Outlet		IEC(4)	
THDv		<5% @ Linear Load	
Full protection		Overload, short circuit, over discharger and over charger	
Line mode overload		>110% only Sounding	
Battery mode overload		>110% Sounding and fault after 1min	
INPUT			
Voltage		220-240Vac	
Voltage Range		165~290Vac	
Frequency Range		50/60Hz(Auto sensing)	
Input Type		IEC 320 C14	
Input Fuse		Yes	

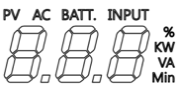
TECHNICAL SPECIFICATIONS

	F15R-650	F15R-1200	F15R-1600
BATTERY			
Battery voltage	12Vdc	24Vdc	24Vdc
Battery type & number	6V 7AH *2	6V7AH *4	6V 9AH *4
Charging Current		1A	
Typical Recharge Time		4 hours	
Easy battery replacement		YES	
INDICATORS			
Display		LCD	
Alarm		Battery mode: Sounding every 30 seconds Low Battery: Sounding every 2 seconds Over Load: Sounding every 0.5 seconds Fault: Continuous sounding	
PHYSICAL			
Dimensions (W * H * D) (mm)	433*44*216	433*44*485	
ENVIRONMENT			
Humidity		0-90 % RH @ 0-40°C (non-condensing)	
Noise Level		Less than 40 dB	
INTERFACE			
RS232		Yes	
USB		Yes	
EPO		Yes	
Smart Slot		Yes	
REGULATION			
Safety		CE	
Standard warranty		3 Year Advance Replacement*	

	**Line mode**
	**Alarm/Fault**
	**Bat mode: battery capacity** Line mode: 1. Battery charging: cycle lighting 2. Battery full charged: lighting 3. Line mode without charger: battery capacity

	**Bat-mode**
	**Sound disable** (Press the mute key 3s to disable and enable the buzzer sound)
	**Load capacity**

LINE MODE & BATT. MODE

				
Initial	AC INPUT (Voltage) V		OUTPUT (Voltage) V	

Alarm Definitions

ALARM	CONDITION
Off	Normal
Beep 1 time In Every 30 Seconds	Utility Failure – The UPS is providing battery power to outlets.
Beep 1 time In Every 2 Seconds	Utility Failure – The UPS is providing battery power. The rapid beeps indicate the battery will run out of power shortly.
Beep 1 time In Every 0.5 Second	Overload - Occurs when connected equipment exceeds the rating of the unit. Turn the UPS off and unplug at least one piece of equipment from the UPS.

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Off The UPS does not perform expected runtime.	Batteries are not fully charged.	Recharge the battery by leaving the UPS plugged in.
	Battery is slightly worn out.	Contact Technical Support.
The UPS will not turn on.	The on/off switch is designed to prevent damage by rapidly turning it off and on.	Turn the UPS off. Wait 10 seconds and then turn the UPS on.
	The unit is not connected to an AC outlet.	The unit must be connected to a 220-240V 50Hz outlet.
	The battery is worn out.	Contact Technical Support.
	Mechanical problem.	Contact Technical Support.
Outlets do not provide power to equipment	Fuse is blown due to overload	Turn the UPS off and unplug at least one piece connected equipment. Unplug the power cord of the UPS then remove the fuse compartment beneath the power inlet of the UPS and replace the blown fuse with a spare one. Lock the compartment back to the UPS. Connect power cord then turn the UPS on. Make sure that your spare fuse meets the specification.
	Batteries are discharged	Allow the unit to recharge for at least 4 hours.
	Unit has been damaged by a surge or spike.	Contact Technical Support.
Software is inactive	The network cable is not connected.	Connect the network cable to the UPS unit and a network port on the hub.
	Software setting problem.	Please read and follow NetAgent utility instruction during installation and operation of the NetAgen software, or contact technical support.
Fault code F09	Output Short : Output circuit short.	Shut down the UPS Your attached equipment may have problems, please remove them and check again.
Fault code F12	Battery voltage is too low.	Shutdown your computer and recharge the battery immediately.
Fault code F13	Battery is overcharged.	Contact Technical Support.
Fault code F14	Overload occurs: Your equipment requires more power than the UPS can provide. It will shut down.	Shut off non-essential equipment. If this solves the overload problem, the UPS will transfer to normal operation.