



S70i Line Interactive Tower UPS

1000VA, 1500VA Models

User & Installation Manual

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Package Contents

You should be receiving the following items inside the package:

- UPS Unit
- User Manual
- Local Monitoring Software CD
- USB cable
- Detachable line cord

Product Introduction

Thank you for selecting this uninterruptible power supply (UPS). It provides you with protection for connected equipment. Please read this manual before installing the S70i Series UPS models S70i-1000 and S70i-1500, as it provides important information that should be followed during installation and maintenance of the UPS and batteries, allowing you to correctly set up your system for the maximum safety and performance. Included is information on customer support and service, if it is required. If you experience a problem with the UPS, please refer to the Troubleshooting section in this manual to correct the problem. If the problem is not corrected, please collect information so that the Technical Support personnel can more effectively assist you.

Product Overview

Many different kinds of sensitive electrical equipment can be protected by an Uninterruptible Power Supply (UPS) including computers, workstations, process control systems, telecommunications systems, sales terminals, other critical instrumentation, etc. The purpose of the UPS is to protect these systems from poor quality utility power, complete loss of power, or other associated problems.

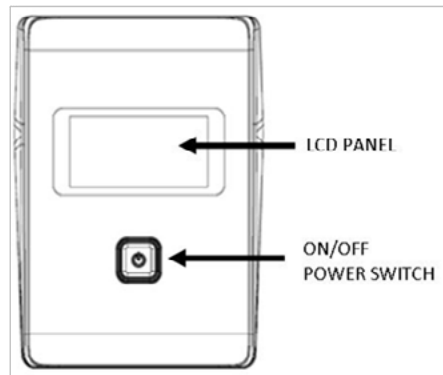
Electrical interference exists in many forms, causing problems in AC power, from lightning, power company accidents and radio transmission motors, air conditioners, and vending machines. Protection of sensitive electrical equipment is vital to protect against power outages, low or high voltage conditions, slow voltage fluctuations, frequency variations, differential and common-mode noise, transients, etc.

To prevent power line problems from reaching critical systems causing damage to software, hardware, and equipment malfunctions, the UPS maintains constant voltage, isolating critical load output and cleaning the utility AC power.

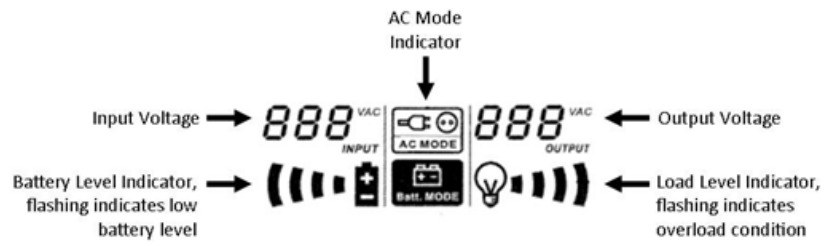
Line Interactive Technology

A line interactive technology UPS provides basic power protection and Automatic Voltage Regulation (AVR) to the load when AC input power is available. When AC input power is unavailable, the line-interactive UPS will switch to batteries to supply the load with power. In the event that the power failure lasts longer than the UPS backup time, the UPS will shut down avoiding battery damage. When the input AC voltage returns, the UPS will automatically return online to recharge the batteries.

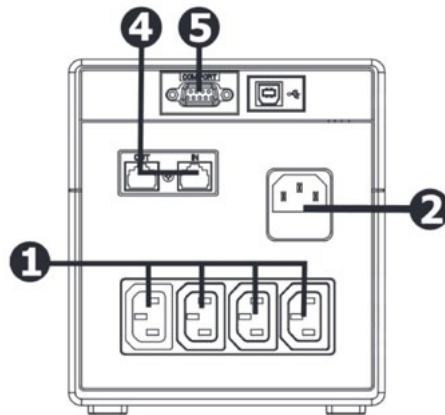
- AC input flows into and through the AVR to the load.
- When AC input varies outside the acceptable specification, the AVR switches taps on the transformer to better regulate the output.
- If AC input power fails, the inverter turns on and supplies power from the batteries to the load.
- When AC input power returns, the UPS automatically begins supplying the load with power through the AVR circuit.
- The charger circuit provides recharge for the batteries.



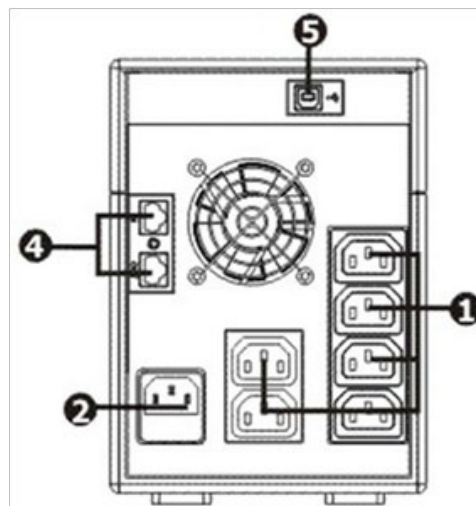
S70i Series front view



S70i LCD front panel



S70i-1000 rear view



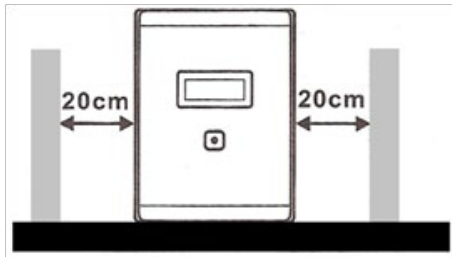
S70i-15000 rear view

Installation & Initial Startup

Note: Before installation, inspect the unit and packaging to make sure that nothing inside has been damaged.

Placement & Storage

Install the UPS in a protected area that is free of excessive dust and has adequate air flow. Place the UPS away from other units at least 7.8 in (20 cm) to avoid interference. DO NOT operate the UPS where the temperature and humidity is outside the specified limits. (See Specifications for details).



Connect UPS to Utility and Charging

Before the initial use of the UPS, plug the UPS input cord into a wall outlet and turn the UPS on by depressing the Power switch on the front of the UPS. For best results, the batteries in the UPS should be charged for at least 6 hours before use. The UPS charges its battery while it is connected to AC utility power and powered on.

Connecting the Loads

Plug the loads to be supported by the UPS into the output receptacles on the rear of the UPS. Simply turn the power switch on the UPS on and the devices connected to the UPS will be protected by the UPS unit.

Connect Modem / Phone for Surge Protection

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

Connect Communication Cable

To allow for unattended UPS shutdown/start-up and status monitoring, connect one end of the communication cable to the USB port and the other end to a USB port of a PC. With the monitoring software installed, you will be able to schedule UPS shutdown/start-up and to monitor the UPS status through the PC.

Turn UPS ON / OFF

To turn the UPS unit on, press the Power switch on the front of the UPS. To turn the UPS unit off, press the Power switch on the front of the unit again.

Cold Start Function

When the UPS is off and there is not input utility power available, it is still possible to cold start the UPS unit to power loads. Follow the instructions for Turning UPS ON and be aware that you will see and hear the ON BATTERY ALARM.

IMPORTANT SAFETY INSTRUCTIONS: (SAVE THESE INSTRUCTIONS)

CAUTION! (UPS having Internal Batteries): Risk of electrical shock – Hazardous live parts inside this unit are energized from the battery supply even when the input AC power is disconnected.

CAUTION! (No User serviceable Parts): Risk of electrical shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION! (Non-isolated Battery supply): Risk of electric shock, battery circuit is not isolated from AC input, hazardous voltage may exist between battery terminals and ground. Test before touching.

WARNING! Unit intended for installation in a controlled environment.

CAUTION! Do not dispose of batteries in a fire, the battery may explode.

CAUTION! Do not open or mutilate the battery, released electrolyte is harmful to the skin and eyes.

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

- Remove watches, rings or other metal objects.
- Use tools with insulated handles.

To reduce the risk of electric shock, disconnect the UPS from the main supply before installing a computer interface signal cable. Reconnect the power cord only after signaling interconnections have been made.

Servicing of batteries should be performed or supervised by personnel with knowledge of batteries and the required precautions. Keep unauthorized personnel away from batteries.

The instructions contained within this safety manual are deemed important and should be closely followed at all times during installation and follow-up maintenance of the UPS and batteries.



CAUTION: The unit has a dangerous amount of voltage. If the UPS indicator is on, the unit's outlets may have a dangerous amount of voltage even when not plugged into the wall outlet because the battery may continue to supply power.

Care should be taken to undertake installation indoors, free from electrically-conductive particles which are under temperature and humidity control, in order to reduce the risk of electric shock.

It is best to disconnect the device using the power supply cord. Ensure that the equipment is placed in a position near the outlet where easily accessible.

All servicing on this equipment must be carried out by qualified service personnel.

Before conducting any maintenance, repair, or shipment, first ensure that everything is turned off completely and disconnected.

Troubleshooting

Condition	Visual Indicator	Alarm
No words display on front panel	Low battery	Charge the UPS at least 6 hours
	Battery fault	Replace the battery with the same type of battery
	The UPS is not turned on	Press the Power Switch on the front of the UPS
Alarm continuously sounds when the AC input is normal	The UPS is overloaded	Remove some of the load from the output of the UPS
When power fails, backup time is shorter than expected	The UPS is overloaded	Remove some of the load from the output of the UPS
	Battery voltage is too low	Charge the UPS at least 8 hours
	Battery defect – possibly due to high environmental temperature or improper operation of the battery	Replace the battery with the same type of battery
Utility power is available but the UPS is in battery mode	Power cord is loose	Reconnect the input power cord properly

Specifications

MODEL NUMBER		S70i-1000	S70i-1500
INPUT	Capacity	1000VA (600W)	1500VA (900W)
	Voltage	220/230/240VAC	
	Frequency	50/60Hz	
OUTPUT	Voltage	230VAC	
	Waveform	Sine wave (normal), simulated sine wave (battery mode)	
	Frequency	50/60Hz auto sensing	
	Transfer time	4ms (typical)	
BATTERY	Battery type	Sealed, maintenance-free lead acid	
	Battery quantity and size	(2) 12V 7AH	(2) 12V 9AH
	Recharge	4–6 hours to 90% capacity	
	Runtime at 50% load	Up to 10 min	
PHYSICAL	UPS dimensions (W x D x H)	5.7 x 13.8 x 6.3 in	5.7 x 15.6 x 8.1 in
	Shipping dimensions	7.5 x 17.4 x 10 in	9.1 x 19.3 x 11.3 in
	UPS weight	17.6 lbs	24.5 lbs
	Shipping weight	19.4 lbs	27.1 lbs
	Line cord	6ft, IEC C13 to Schuko	
	Receptacles	(4) IEC C13	(6) IEC C13
	Cooling	Convection cooled	Fan cooled
ENVIRONMENT	Operating temperature	32–104°F (0–40°C)	
	Humidity	0–90%	
	Altitude	11,500 ft above sea level	
INDICATORS & ALARMS	LCD display	AC mode, battery mode, load/battery level, input/output voltage, overload fault, low battery	
	Data line protection	RJ45	
APPROVALS	CE, RoHS		
WARRANTY	2 years electronics and battery		
COMMUNICATIONS INTERFACE	USB		
INCLUDED IN BOX	Shutdown and monitoring software, USB cable, user manual, detachable line cord		

Obtaining Service

If the UPS requires Service:

1. Use the TROUBLESHOOTING section in this manual to eliminate obvious causes.
2. Verify there are no circuit breakers tripped.
3. Call your dealer for assistance. If you cannot reach your dealer, or if they cannot resolve the problem, call Xtreme Power Conversion Corp Technical Support at 800.582.4524. Technical support inquiries can also be made at support@xpcc.com. Please have the following information available BEFORE calling the Technical Support Department:
 - Your name and address.
 - The serial number of the unit.
 - Where and when the unit was purchased.
 - All of the model information about your UPS.
 - Any information on the failure, including LED's that may or may not be illuminated.
 - A description of the protected equipment, including model numbers if possible.
 - A technician will ask you for the above information and, if possible, help solve your problem over the phone. In the event that the unit requires factory service, the technician will issue you a Return Material Authorization number (RMA).

If you are returning the UPS to Xtreme Power for service, please follow these procedures:

1. Pack the UPS in its original packaging. If the original packaging is no longer available, ask the Technical Support Technician about obtaining a replacement set of packaging material. It is important to pack the UPS properly in order to avoid damage in transit. Never use Styrofoam beads for a packing material.
2. Include a letter with your name, address, daytime phone number, RMA number, a copy of your original sales receipt, and a brief description of the problem.
3. Mark the RMA number on the outside of all packages. Xtreme Power cannot accept any package without the RMA number marked on the outside of the boxes.
4. Return the UPS by insured, prepaid carrier to the address provided by the Technician.
5. Refer to the Warranty statements in this manual for additional details on what is covered.

Xtreme Power Conversion Limited Warranty

Xtreme Power Conversion (XPC) Corporation warrants Xtreme Power Conversion equipment, when properly applied and operated within specified conditions, against faulty materials or workmanship (excluding batteries) for a period of **two years for S70i-Series products** from the date of purchase. XPC Corporation warrants **internal batteries for a period of two years** from the date of purchase. For warranty units, an (RMA) must be requested for all claims. XPC will honor warranties at the sole discretion of XPC Corporation after units have been evaluated.

If equipment provided by XPC Corporation is found to be **Dead-on-Arrival (DOA)**, the customer must request and received a **Return Material Authorization (RMA)** number. DOA equipment is defined as equipment that does not properly function according to user documentation when initially received and connected in conjunction with proper procedures as shown in the user documentation or via support provided by XPC Corporation personnel or authorized agents.

This warranty shall be void if (a) the equipment is repaired or modified by anyone other than XPC Corporation or a XPC Corporation approved third party; (b) the equipment is damaged by the customer, is improperly used or stored, is subjected to an adverse operating environment, or is operated outside the limits of its electrical specifications; or (c) the equipment has been used or stored in a manner contrary to the equipment's operating manual, intended use or other written instructions. Any technical advice furnished by XPC Corporation or a XPC Corporation authorized representative before or after delivery with regard to the use or application of Xtreme Power Conversion equipment is furnished on the basis that it represents XPC Corporations best judgment under the situation and circumstances, but it is used at the recipient's sole risk.

EXCEPT AS STATED ABOVE, XPC Corporation DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

EXCEPT AS STATED ABOVE, IN NO EVENT WILL XPC Corporation BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF Xtreme Power Conversion EQUIPMENT, including but not limited to, any costs, lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, cost of substitutes, or claims by third parties. Purchaser's sole and exclusive remedy for breach of any warranty, expressed or implied, concerning Xtreme Power Conversion equipment, and the only obligation of XPC Corporation under this warranty, shall be the repair or replacement of defective equipment, components, or parts; or, at XPC Corporations sole discretion, refund of the purchase price or substitution of an equivalent replacement product.