



User Manual

SEKURY™ C 500VA

1. Introduction

SEKURY™ C includes a software which can remote and control UPS through LAN, get warning notifications through broadcast and mobile phone, multi-shutdown PCs and schedule UPS self-test. This unique software provides complete power protection for computer system while power failure.

The line of UPS provides boost and buck AVR to stabilize input voltage and full protection to your computers and peripheral devices such as scanners, monitors, modems, etc. from losing valuable data as a result of power failures. In the event of a utility failure such as a blackout, brownout, or power sag (when the lights in a room dim for a moment), the UPS rapidly transfers your computer equipment to an alternative power source. This allows you adequate time to save files, exit programs, and properly shut down your system.

Under normal conditions, when the available AC voltage is within limits that are appropriate for your equipment, the SEKURY™ C UPS maintains it's battery charge, and otherwise remains invisible in it's operation.

When the power supply is transferred from utility (AC) power to backup (battery-DC) power, the waveform is altered, with minimal transfer time from a normal sine wave to a step sine wave. According to research, a rough wave transition or an imperfect step sine wave could cause a voltage transient. Eventually, this voltage transient could damage the most circuitry within the UPS, and decrease its life. The UPS surpasses the competition in producing the smoothest transition from sine wave to step sine wave.

Major features of SEKURY™ C Series are listed as follows:

- Microprocessor control guarantees high reliability.
- Auto turn on at first plug-in.
- Provide boost and buck AVR to stabilize input voltage.
- Built-in Smart USB & RS-232 Communication Port.
- Smart software bundled to monitor UPS with powerful features.
- Provide lightning, surge, overload, and short-circuit protection.
Green Power function for energy saving.
- Auto restart when AC recovery.
- Power Switch Off-delay function.

2. Safety – CAUTION!

This UPS utilizes voltages that may be hazardous. Do not attempt to disassemble the unit. The unit contains no user serviceable parts. Only factory service personnel may perform repairs.

Connection to any other type of receptacle other than a two-pole, three-wire grounded receptacle may result in a shock hazard as well as violate local electrical codes.

In the event of an emergency, turn the power switch to the “off” position and disconnect the power cord from the AC power supply to properly disable the UPS.

Avoid placing the UPS in locations where there is standing or running water, or excessive humidity.

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.

Do not plug the UPS' power cord into itself.

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 the UPS.

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

Unplug the UPS prior to cleaning and do not use liquid or spray detergent. 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.

Unplug the UPS prior to cleaning and do not use liquid or spray detergent. Do not dispose of battery or 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. It may be toxic.

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.
- 2) Use tools with insulated handles.
- 3) Wear rubber gloves and boots.

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 of the sealed lead-acid batteries.

3. System Description

LED Indicators & Audible Alarms –

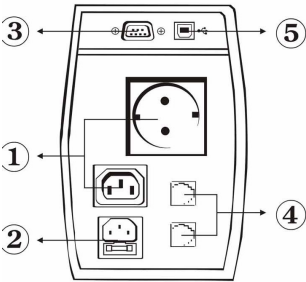
Condition	LED		Audible Alarm
	Green	Red	
AC Mode	■		None
Battery Mode	▲		Sounding every 10 seconds
Low Battery		■	Sounding every second
Overload			Sounding every 0.5 second
Battery Replacement			Sounding every 2 seconds
Fault		■	Continuously sounding

■ —LED on

▲ —LED flash

Back Panel—

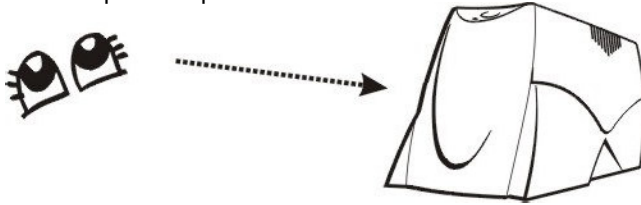
1. Output receptacles / one Schuko
2. RS-232 Communication Port
5. USB Communication Port
3. AC input with AC fuse
4. Phone/Modem Surge Protection



4. Installation and Operation

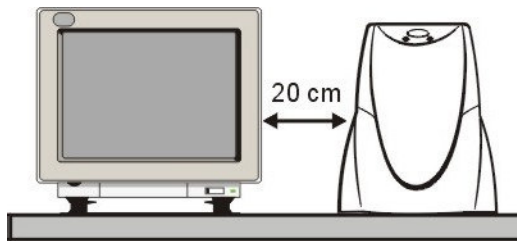
1. Inspection

Remove the UPS from its packaging and inspect it for damage that may have occurred during shipping. If any damage is discovered, repack the unit and return it to the place of purchase.



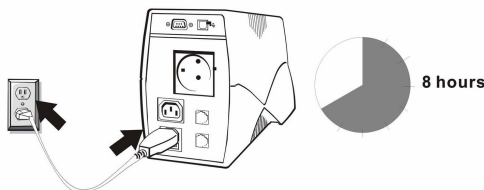
2. Placement

Install the UPS unit in any protected environment that provides adequate airflow around the unit, and is free from excessive dust, corrosive fumes and conductive contaminants. Do not operate your UPS in an environment where the ambient temperature or humidity is high. On the other hand, place the UPS unit away from monitor at least 20cm to avoid interference.



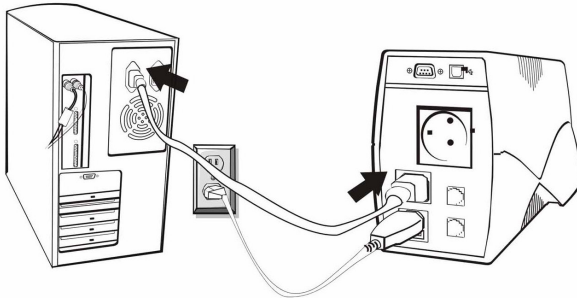
3. Charging

This unit is shipped from the factory with its internal battery fully charged, however, some charge may be lost during shipping and the battery should be recharged prior to use. Plug the unit into an appropriate power supply and allow the UPS to charge fully by leaving it plugged in for at least 8 hours.



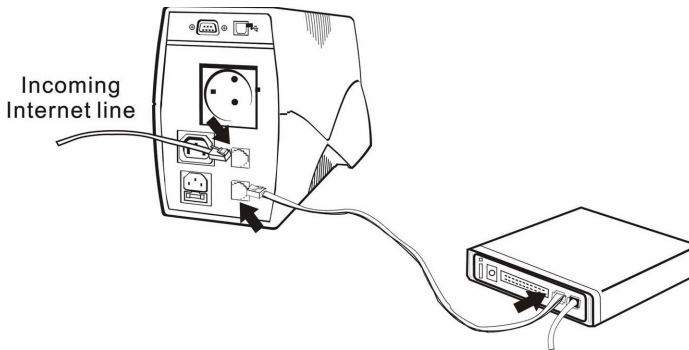
4. Computer Connection

Connect one computer-related device into each of the power receptacles supplied on the back of the UPS.



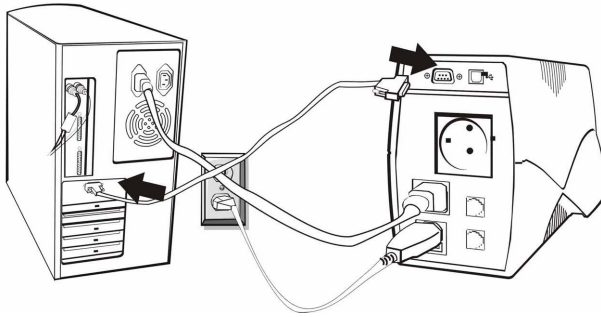
5. Modem/Phoneline Connection

Plug incoming internet line into the “In” socket at the back of the SEKURY™ C UPS. Use one more Internet line cable and plug one end of the Internet line cable to the “Out” socket at the back of SEKURY™ C UPS. Plug the other end to the modem input socket as shown.



6. USB and Serial Cable Connection

To allow for unattended system shutdown for your operating system, connect the USB and SERIAL cable as per diagram below. Please also do not connect Serial and USB connectors to the PC together at the same time.

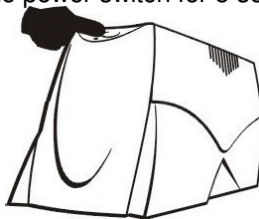


6. Turn On/Off

SEKURY™ C Series will be turned on automatically at first plug-in. At this moment, press and hold power switch for 5 seconds lightly to turn off the UPS. To turn on the UPS again, press and hold the power switch for 5 seconds. Please **DO NOT** punch it for extended life of the power switch.

7. DC Start

To start the UPS when AC utility power is not available and battery is fully charged, press and hold the power switch for 5 seconds.



8. Green Power Function

All SEKURY™ C Series are equipped with Green Power Function. If no load connects to the UPS, it will automatically shut down in 5 minutes for energy saving while power failure. The UPS will restart while AC recovery.

Note: The Power Switch must be kept in the 'ON' position, otherwise, the UPS will be disabled and your equipment will not be protected during a power failure.

4. Trouble Shooting

Symptom	Possible Cause	Remedy
No LED display on the front panel.	1. Missing battery.	1. Charge battery up to 8 hours.
	2. Battery defect.	2. Replace with the same type of battery.
	3. Power switch is not pressed at least 5 seconds.	3. Press and Hold power switch for at least 5 seconds.
Alarm buzzer beeps continuously when AC supply is normal.	Overload of the UPS.	Verify that the load matches the UPS capability specified in the specs.
When power failure, back-up time is shorten.	1. Overload of the UPS.	1. Remove some noncritical load.
	2. Battery voltage is too low.	2. Charge battery 8 hours or more.
	3. Battery defect due to high temperature operation environment, or improper operation to battery.	3. Replace with the same type of battery.
Communication lost between UPS and computer.	1. Software is not installed well.	1. Check the setting of the software .
	2. Cable is not properly connected.	2. Check the RS-232 cable is firmly connected to COM1/COM2 of the computer and confirm the setting again or check if USB cable is connected correctly to USB port on PC.
Mains normal but red and	1. Fuse is blown.	1. Replace the same type of fuse.
	2. Power cord is loose.	2. Reconnect the power cord

5. Specification

MODEL		SEKURY™ C 500
CAPACITY	VA	500 VA
	W	300 W
INPUT	Voltage	230VAC
	Voltage Range	0-300VAC
OUTPUT	Voltage	230VAC
	Voltage Regulation (Batt. Mode)	+/- 10%
	Frequency	50Hz
	Frequency Regulation (Batt. Mode)	+/- 1 Hz
	Output Waveform	Modified Sinewave
BATTERY	Battery Type & Number	12V/7Ah x 1pc
	Backup Time at	25minutes (depending of load)
	Recharge Time	3-5 hours to 90% after complete discharge
TRANSFER	Typical	<4ms
INDICATOR	AC Mode	Green LED lighting
	Battery Mode	Green LED flashing
	Fault / Low Battery / Battery Replacement	Red LED lighting
AUDIBLE ALARM	Battery Mode	Sounding every 10 seconds
	Low Battery	Sounding every second
	Overload	Sounding every 0.5 seconds
	Battery Reemplac.	Sounding every 2 seconds
	Fault	Continuously Sounding
PROTECTION	Full Protection	Under/Over Voltage, Spike and Surge Suppression, overload, EMI/RFI Filter and Short Circuit Protection
PHYSICAL	Dimension	345x120x160
	Net Weight (kgs)	6.6 Kgs
	Operating	0 °C - 40 °C at full load, 0-90 % relative humidity

6. Software Installation

This software is an unique uninterruptible power supply (UPS) control software that offers you unprecedented convenience for the control of any UPS.

Software compatible with Windows 95 / 98 / NT / 2000 / XP.

Linux x86, Compaq True64, IBM AIX 4.3x, 5x, FreeBSD 4.x, UnixWare IA32, Sun

Solaris/x86 2.6, 7, 8, 9, Sun Solaris/Sparc 2.6, 7, 8, 9, HP-US 11.x & MAC.

If you connect the UPS using USB connector to the PC, the monitoring software only will be compatible with Windows OS.

Features:

- Saves files before shutdown occurs.
- Power flow display for monitoring UPS status.
- Scheduled system shutdown / restart Scheduled UPS test.
- Warning notification via E-mail / Pager.
- Warning notification via Broadcast Password security protection.
- Remote Monitor / Control via LAN.
- Safety to shutdown Multi-systems.
- Selectable User Interface (Background).
- UPS Parameter setting.
- Record logs for analysis.



Installing the monitoring software is a simple process:

1. Install CD-ROM
2. Type in Serial No: 511C1-01220-0100-478DF2A to install the software.