

Owner's Manual

Line-Interactive Sine Wave UPS Systems

**Models: SMART600PSGLCD, SMART1000PSGLCD,
SMART1200PSGLCD, SMART1500PSGLCD**
(Series Numbers: AG-0529, AG-052A, AG-052B, AG-052C, AG-052D)

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WARRANTY REGISTRATION

Register your product today and be automatically entered to win an ISOBAR® surge protector in our monthly drawing!



tripplite.com/warranty



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1. Important Safety Instructions

SAVE THESE INSTRUCTIONS

This manual contains instructions and warnings that should be followed during the installation, operation and storage of this product. Do not operate the UPS before reading all safety information and operating instructions thoroughly. Comply with all warnings and operating instructions. Failure to heed these warnings may affect the warranty.

Transportation

- Transport the UPS system only in the original package to protect against shock and impact.

Preparation

- Do not dismantle the UPS system. There are no user-serviceable parts.
- 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.
- Condensation may occur if the UPS system is moved directly from a cold environment to a warm environment. The UPS system must be completely dry before installation. Allow at least two hours for the UPS system to acclimate to the environment.
- Do not install the UPS system near water or in a moist environment.
- Do not install the UPS system where it will be exposed to direct sunlight or heat.
- Do not block the ventilation openings in the UPS housing.

Installation

- This UPS intended for installation in a controlled environment (temperature-controlled, indoors and free of conductive contaminants). Avoid installing the UPS in locations where there is standing or running water or excessive humidity.
- **Caution** - Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- **WARNING:** This is a category C2 UPS product. In a residential environment, this product may cause radio interference, in which case the user may be required to take additional measures.

Operation

- Keep fluids and other foreign objects away from inside of the UPS system.
- Do not connect appliances or devices which would overload the UPS system to the UPS outlets.
- Place cables in such a way that no one can step on or trip over them.
- Do not connect household appliances, such as hair dryers, to UPS output sockets.
- The UPS can be operated by individuals with no previous experience.
- Connect the UPS system only to a properly grounded AC power outlet that is easily accessible and close to the UPS system.
- Use only a VDE-tested, UL-marked power cable (e.g. the power cable of your computer) to connect the UPS system to the building wiring outlet (grounded outlet).

Important Safety Instructions

Maintenance, Service and Faults

- The UPS system operates with hazardous voltages. Repairs may be carried out only by qualified service personnel.
- **Caution - risk of electric shock.** Even after the unit is disconnected from the mains (building wiring outlet), components inside the UPS system are still connected to the battery and electrically live and dangerous.
- Before performing any kind of service and/or maintenance, disconnect the batteries and verify that no current is present and no hazardous voltage exists in the terminals of high-capability capacitors such as bus-capacitors.

Battery Warnings

- Batteries can present a risk of electrical shock and burn from high short-circuit current. Observe proper precautions. There are no user-serviceable parts inside the UPS. Do not open the UPS except to perform battery replacement. Do not open batteries. Do not short or bridge the battery terminals with any object. Do not dispose of batteries in a fire. The batteries may explode. Released material is harmful to the skin and eyes. It may be toxic. Unplug and turn off the UPS before performing battery replacement. Use tools with insulated handles. Battery replacement should be performed only by authorized service personnel using the same number and type of batteries (Sealed Lead-Acid). Do not dispose of the batteries in a fire. Visit Tripp Lite at tripplite.com/products/battery-finder to locate the specific replacement battery for your UPS.

Storage and Maintenance

Before storing, charge the UPS 5 hours. Store the UPS covered and upright in a cool, dry location. During storage, recharge the battery in accordance with the following table:

Storage Temperature	Recharge Frequency	Charging Duration
32°F to 104°F / 0°C to 40°C	Every 3 months	1-2 hours



The batteries are recyclable. Refer to your local codes for disposal requirements or in the USA only call 1-800-SAV-LEAD or 1-800-8-BATTERY (1-800-822-8837) or visit www.rbrc.com for recycling information.

2. Introduction

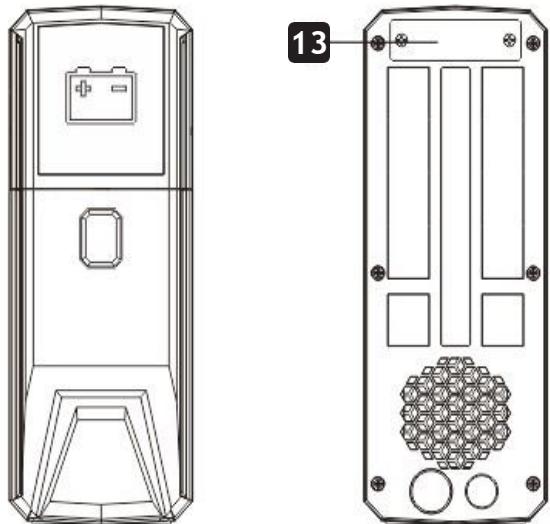
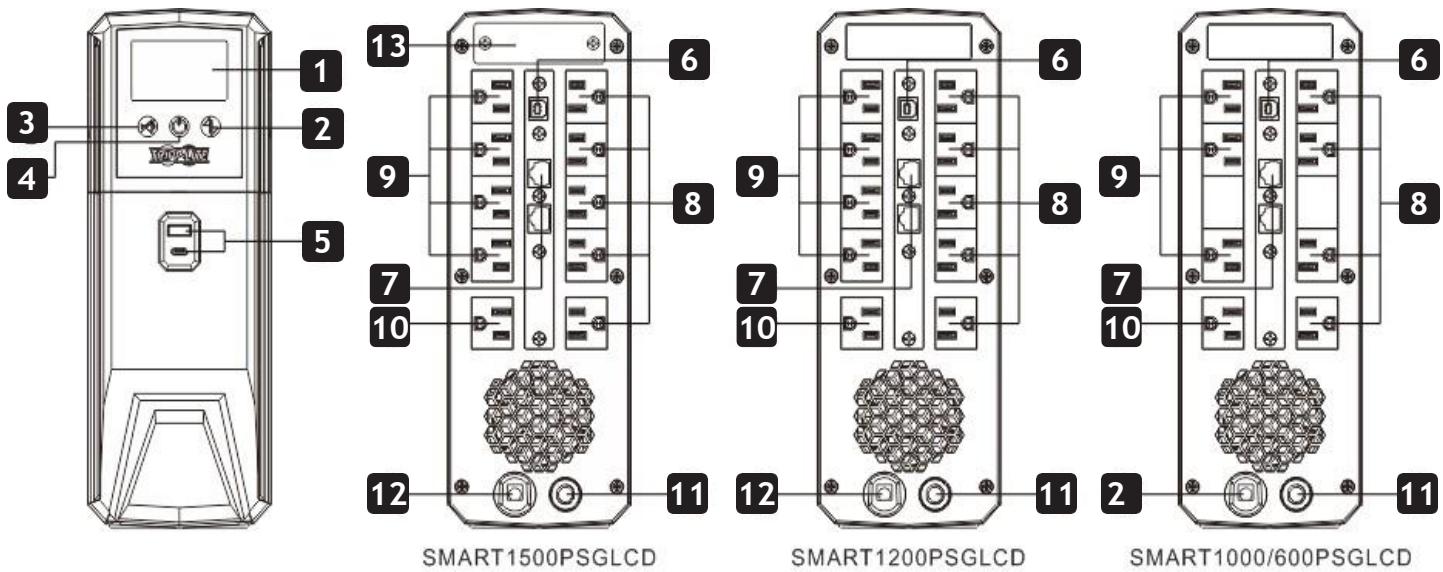
This product is an intelligent line-interactive sine wave UPS, designed to protect your personal computer or sensitive electronic equipment from all forms of power interference, including complete power failure.

3. Package Contents

- UPS Unit
- USB Cable
- RJ45 Cable
- Owner's Manual

NOTE: Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. Keep the original package in a safe place for future use.

4. Product Overview

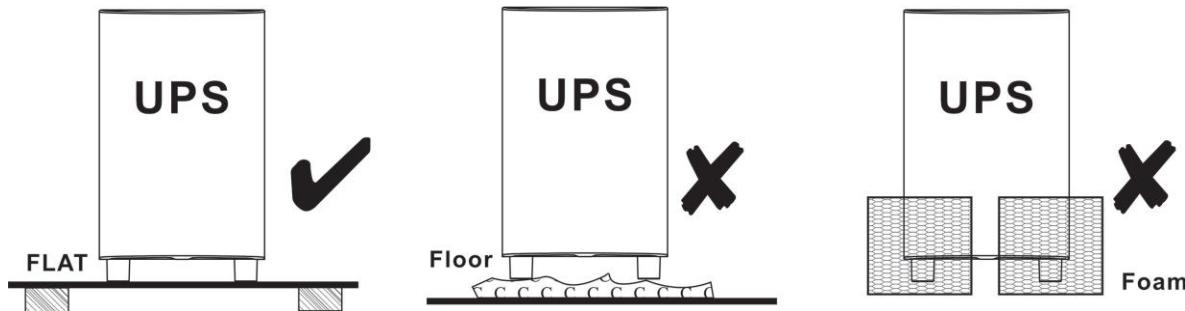


- 1** LCD Display
- 2** Up / Down Button
- 3** Mute Button
- 4** On / Off Button
- 5** USB Charger Ports for Device Charging (5V 3A, 1x USB-A, 1x USB-C)
- 6** USB Communication Port for UPS Monitoring and Control
- 7** Modem/Phone/Network Surge Protection
- 8** Surge-Protected Outlets
- 9** Battery Backup Outlets
- 10** Master Battery Backup and Surge-Protected Outlet
- 11** Input Circuit Breaker
- 12** Input Power Cord for Connecting to Utility Power
- 13** External Battery Terminal

5. Installation

Before installing the UPS, select a proper location to install the UPS.

- Place the UPS on a flat and clean surface, away from vibration, dust, humidity, high temperature, flammable liquids and gases and corrosive and conductive contaminants. Install the UPS indoors in a clean environment, away from windows and doors.



- Use the UPS at a maximum altitude of 3281 ft. (1000 m) to keep UPS normal operation at full load. In high-altitude areas, reduce the connected load. Altitude derating power with connected loads for normal operation is listed as below:

Altitude	Derating factor ¹
3281 ft. (1,000 m)	1.0
4921 ft. (1,500 m)	0.95
6562 ft. (2,000 m)	0.91
8202 ft. (2,500 m)	0.86
9843 ft. (3,000 m)	0.82
11,483 ft. (3,500 m)	0.78
13,123 ft. (4,000 m)	0.74
14,764 ft. (4,500 m)	0.7
16,404 ft. (5,000 m)	0.67

Based on density of dry air =1.225 kg/m³ at sea-level,+15°C

¹Because fans lose efficiency with altitude, force air-cooled equipment will have a smaller derating.

- The UPS is equipped with the fan for cooling. Place the UPS in a well-ventilated area. Maintain minimum clearance of 4 in. (100 mm) in front of the UPS and 12 in. (300 mm) in the back and on the sides of the UPS for heat dissipation and maintenance.

Step 1: UPS Input Connection

Plug the UPS into a two-pole, three-wire, grounded receptacle only. Do not use an extension cord. Charge the battery at least 5 hours before initial use. The unit charges its battery while connected to utility power.

Note: To achieve the full-load run time, the battery must be fully charged.

Step 2: UPS Output Connection

Battery Backup Outlets (5)

Connect the computer to the master outlet and monitor(s) to the battery backup outlets. These outlets provide battery backup, EMI filtering, line conditioning, and surge protection. Battery power is provided automatically in case of power failure.

5. Installation

Surge-Protected Outlets (5)

Connect a printer, fax machine, or scanner to the “Surge-protected” outlets. These outlets do not provide power during power failures.

CAUTION: NEVER connect a laser printer or scanner to the battery backup outlets of the UPS. The equipment may draw significant power to overload the UPS.

Step 3: Connect Modem/Phone Line/Network Surge Protection

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

Note: Connecting to the Modem/Phone Line/Network Surge Protection will limit your internet speed to 100Mbps

Step 4: Connect Modem/Phone Line/Network Surge Protection

The UPS includes USB communication ports and tel/DSL/Ethernet surge protection jacks (not compatible with Power over Ethernet applications). These connections are optional. The UPS will function properly without these connections.

If the on-line AC power icon  does not illuminate when the UPS is turned on, try the following:

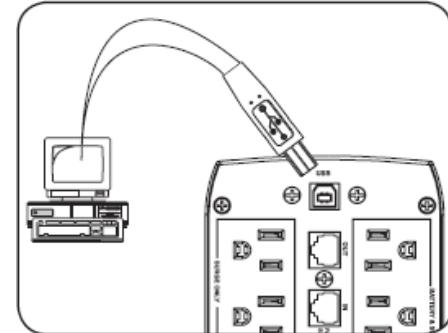
1. Make sure the UPS is plugged into a live AC outlet.
2. Press and hold the ON/OFF button for two seconds to turn on the UPS. A beep will sound when the UPS starts.
3. If the UPS still does not start, contact Tripp Lite Tech Support for assistance.

HID Function (Optional)

This UPS is equipped with HID functionality. Connect one computer with Microsoft Windows via the USB port to execute safe shutdown during power failure using only Windows Power Manager. (Image at right)

Step 5: Turn On the UPS

To turn on the UPS, simply press the ON/OFF button on the front panel for two seconds. The UPS will beep once, the front LEDs will illuminate solid red and scroll in blue from the lower portion to the top and the bottom LEDs will illuminate solid red shift from red to blue. The LCD will then turn on.

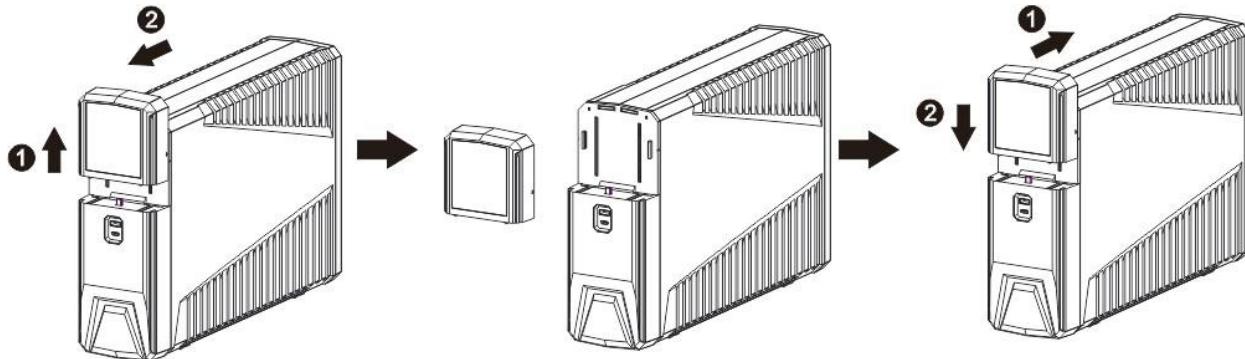


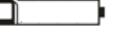
Connect to a computer with Microsoft Windows to enable HID functionality (optional).

5. Installation

Remote panel operation

The LCD panel can be removed from the base and placed in a location that is easier to view. Follow the steps below to remove the remote panel. The distance between the remote panel and the base cannot exceed 20 ft. (6 m).



An NiMH battery is installed on the back of remote panel. Once the remote panel is installed on the base unit, it charges the battery automatically. When the battery capacity is low, the  icon flashes to remind you to charge the remote panel.

6. Battery Replacement

Under normal conditions, the original battery in your UPS will last several years. Battery replacement should only be performed by qualified service personnel. Refer to **Battery Warnings** in section 1. **Important Safety Instructions** for complete safety information.

- **WARNING!** This UPS contains potentially hazardous voltages. Do not attempt to disassemble the UPS beyond the battery replacement procedure.
- This UPS contains no user serviceable parts. Repairs and battery replacement must be performed by **QUALIFIED SERVICE PERSONNEL ONLY**.
- **Caution** - Do not dispose of batteries in a fire. The batteries may explode.
- **Caution** - Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
- **Caution** - A battery can present a risk of electrical shock and high short-circuit current. Contact with any part of a grounded battery can result in electrical shock. 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.
 4. Do not lay tools or metal parts on top of batteries.
 5. Disconnect the charging source and load prior to installing or maintaining the battery.
 6. Remove battery grounds during installation and maintenance to reduce the likelihood of shock. Remove the connection from ground if any part of the battery is determined to be grounded.
- **Caution** - risk of electric shock. The battery circuit is not isolated from the input voltage. Hazardous voltages may occur between the battery terminals and the ground. Before touching, verify that no voltage is present.
- Replace the fuse or circuit breaker only with the same type and amperage in order to avoid fire hazards.
- Only persons adequately familiar with batteries and the required precautionary measures may replace batteries and supervise operations. Unauthorized persons must keep away from the batteries.
- **Caution** - Replace batteries with the same number and type as originally installed in the UPS. These batteries have pressure-operated vents. The UPS system contains sealed, non-spillable maintenance-free lead acid batteries.

Installation

NOTE: If there is a power interruption while replacing the batteries, the load will not be backed up even if the UPS is on. To replace the batteries with UPS on, start with step 5.

Follow the steps below to replace the battery.

Step 1: Turn off all equipment plugged into the UPS system's outlets.

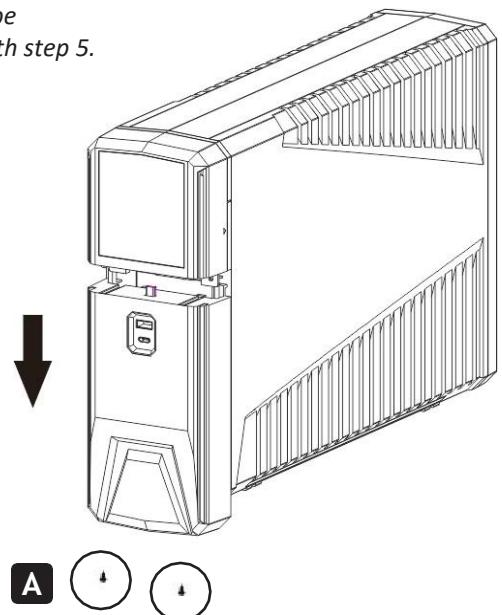
Step 2: Turn off the UPS.

Step 3: Remove the UPS system's AC input plug from the AC wall outlet.

Step 4: Unplug all equipment from the UPS system's outlets.

Step 5: Remove the battery cover by loosening

the two screws **A** located on the bottom of the UPS and slide the battery cover downward, then outward.

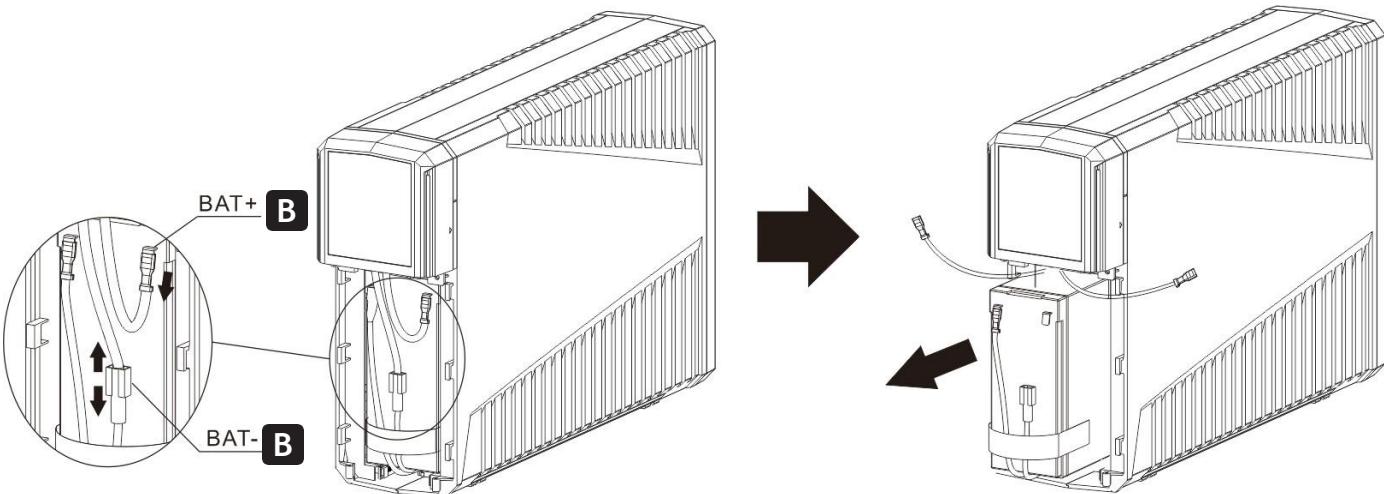


Step 6: Disconnect the battery wires **B** (BAT+ and BAT-).

Then, slide out the existing battery pack from the UPS by grasping the battery tap.

Caution - Do NOT short the positive wire and negative wire of the battery.

Caution - DO NOT pull the battery pack out by pulling on the battery wires.



Step 7: Slide the new battery pack into the UPS.

Step 8: Verify proper polarity. Reconnect the battery connectors.

NOTE: Some sparking might occur. This is normal.

Step 9: Reinstall the battery cover. The UPS is ready for normal operation.

NOTE: Properly dispose of the old batteries at an appropriate recycling facility. Refer to your local codes for disposal requirements or in the USA only call 1-800-SAV-LEAD or 1-800-8-BATTERY (1-800-822-8837) or visit www.rbrc.com for recycling information.

7. ECO Energy-Saving Setup

The ECO energy-saving feature enables your UPS system to save energy by automatically turning off designated outlets when your computer is turned off or in Standby Mode. ECO Mode is disabled by default.

Enabling ECO Mode

1. Connect essential peripheral devices to the “Controlled by Master Outlet” outlets on the “Battery & Surge Only” side for battery and surge protection, with the option of being controlled by the Master Outlet.
2. Connect a master device, such as a desktop computer or audio/visual receiver to the master outlet.

NOTE: A minimum of 20W is required for the master outlet to power on.

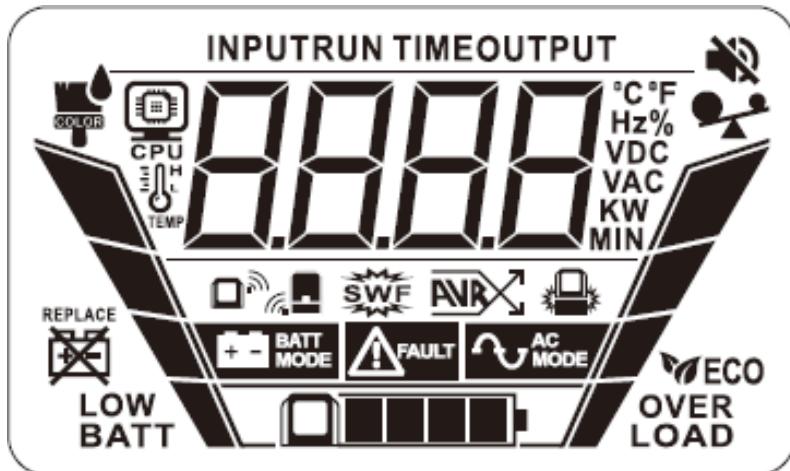
3. With the UPS system turned on and operating normally from utility power, press and hold the Up/Down button for 2 seconds to enter the LCD menu. Navigate to P14 to enable or disable ECO Mode.
4. When the UPS system detects a drop in load (<20W) on the master outlet for approximately 3 minutes, it will turn off the “Controlled by Master Outlet” outlets. The 3-minute delay ensures the ECO outlets remain powered during a reboot.

8. Operation

Button Functions

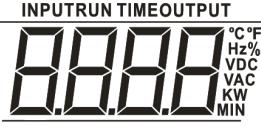
Button	Function
On/Off	<ul style="list-style-type: none">• Press and hold 2 seconds to turn the UPS on or off.• Holding the “On/Off” button for 10 seconds can reset the unit in case of communication failure between remote panel and UPS.• Quick-press the button 5 times to reset pairing when wireless transmission fails.• In Menu Mode, the On/Off button is used to select a sub-menu or approve the selection of a setting.
Mute	<ul style="list-style-type: none">• Press and hold 2 second to enable or disable mute function.• A quick press of the mute button will return to the main screen or exit the setting programs.
Up/Down	<ul style="list-style-type: none">• Press and hold 2 seconds to enter the setting menu.• A quick press will switch display information.

LCD Panel



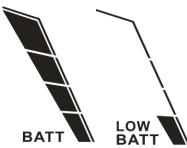
8. Operation

LCD Panel

Display	Function
Configuration and Fault Information	
	Indicates the fault or warning codes.
Mute Operation	
	Indicates the UPS alarm is disabled.
Input, Battery, Backup Time, Output and Load Information	
	Indicate the input voltage, input frequency, battery voltage, battery capacity, backup time, output voltage, output frequency, load capacity, load percentage, NiMH battery, PC CPU speed, PC CPU temperature and PC CPU load percentage. K: Kilo, W: Watt, V: Voltage, A: Amperage, %: Percent, : Degrees Centigrade, Hz: Frequency, min: Minutes.
Load Information	
	Indicates the load level by 0-24%, 25-49%, 50-74% and 75-100%, or overload alarm.
Mode Operation Information	
	UPS is operating in Line Mode
	UPS is operating in AVR Mode.
	UPS is operating in Battery Mode.
	Setting for the LED bars.
	Indicates PC's CPU temperature (°C/°F). Setting for temperature alarm level.
	Indicates PC's CPU speed (Mhz).
	Indicates PC's CPU Load.
	Indicates wireless connection paired.
	Indicates the display module is docked.

8. Operation

LCD Panel

Display	Function
Battery Information	
	Indicates the UPS battery level range: 0-24%, 25-49%, 50-74% and 75-100%. When the battery reaches low battery level, the "LOW BATT" icon will display.
	Indicates the NiMH battery level of remote LCD panel.

NOTE: Except when in UPS fault condition, the LCD backlight automatically shuts off if there is no action for 1 minute (30 seconds when panel is removed from base).

Audible Alarms

Overload	Sounds every 0.5 seconds
Low Battery	Sounds every second
Overcharge	Sounds every 1.5 seconds
Battery Replacement	Sounds every 2 seconds
Battery Mode	Sounds every 10 seconds
Fault	Sounds continuously

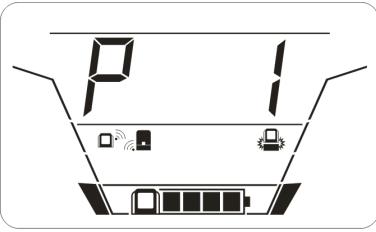
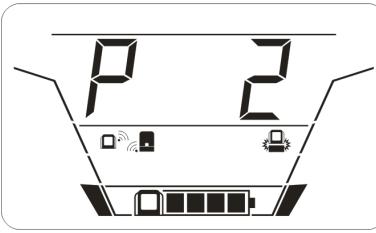
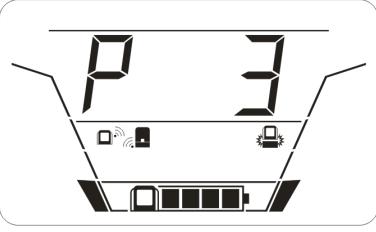
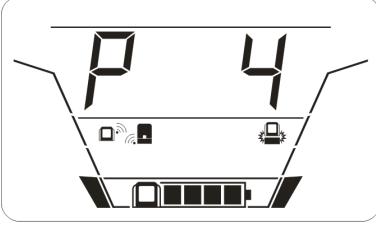
Warning Indicators

Display	Warning	Flashing or On	Alarm
	Over-current on output	Flashes every 0.5 secs	Sounds every 0.5 secs
	Overload	Flashes every 0.5 secs	Sounds every 0.5 secs
	Low battery	Flashes every 0.5 secs	Sounds every 1 sec
	Battery replacement or battery is not connected.	On	Sounds every 2 secs
	Site wiring fault	On	N/A
	Abnormal NiMH battery charging	Flashes every 0.5 secs	N/A

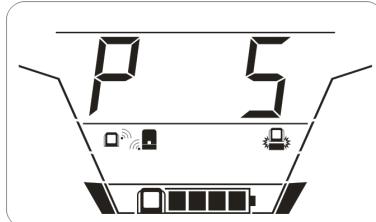
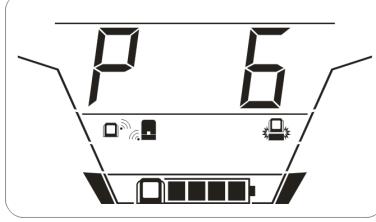
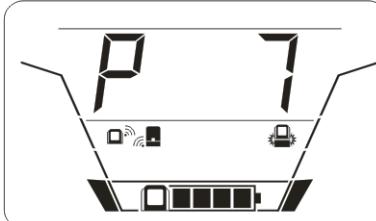
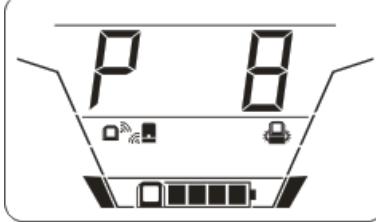
8. Operation

LCD Setting Mode

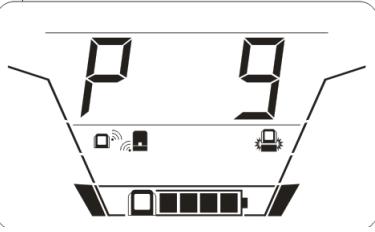
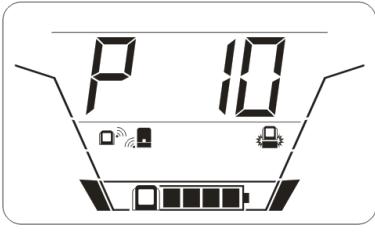
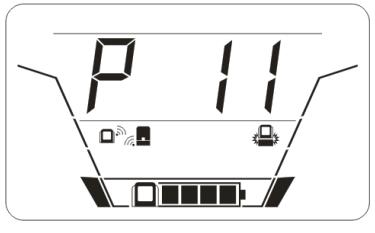
After pressing and holding the “Up/Down” button for 2 seconds, the unit will enter Setting Mode. Press the “Up/Down” button to select setting programs. Press the “On/Off” button to enter the selectable options page. Press the “On/Off” button again to access selectable options. Press the “Up/Down” button to switch different options. Once the option is selected, press the “On/Off” button to confirm or the “Mute” button to exit.

Program	Description	Selectable option	
	PC's CPU Temp. Alarm Level	50°C P 50	60°C(default) P 60
		70°C P 70	80°C P 80
		90°C P 90	
	On-Off RGB LED Front Bank	LED off ELd5	LED on(default) ELES
		Energy saving ELEN	
	On-Off RGB LED Bottom Bank	LED off ELd5	LED on (default) ELEN
		Energy saving ELES	
	Brightness of RGB LED Front Bank	Low b LO	Normal bN0H
		High (default) b HI	

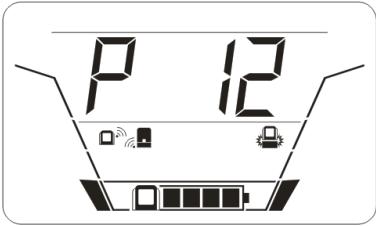
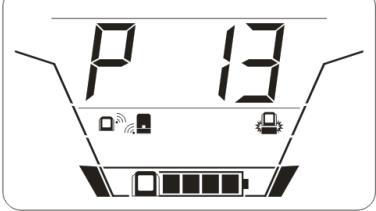
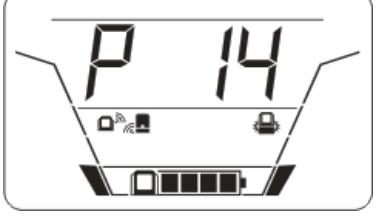
8. Operation

Program	Description	Selectable option	
	Brightness of RGB LED Bottom Bank	Low 	Normal 
		High (default) 	
	Scrolling Speed for RGB LED Front Bank	Low 	Normal (default) 
		High 	
	Scrolling Speed for RGB LED Bottom Bank	Low 	Normal (default) 
		High 	
	RGB LED Front Bank Effects	Power bar 	Power color shift 
		Power fade 	Solid (default) 
		Breath 	Scrolling 
		Spectrum cycling 	Spark 

8. Operation

Program	Description	Selectable option	
	RGB LED Bottom Bank Effects	Power fade 	Solid(default) 
		Breath 	Spectrum cycling 
	Color1 RGB LED Front Bank	Red 	Orange (default) 
		Yellow 	Green 
		Aqua 	Blue 
		Purple 	White 
		Others 	
	Color2 RGB LED Front Bank	Red 	Orange 
		Yellow (default) 	Green 
		Aqua 	Blue 
		Purple 	White 
		Others 	

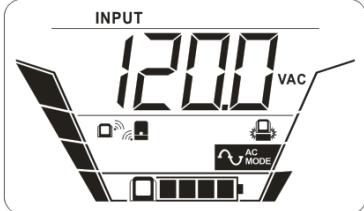
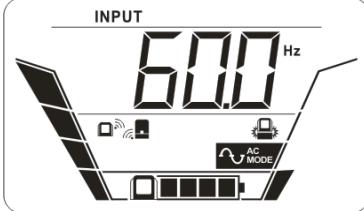
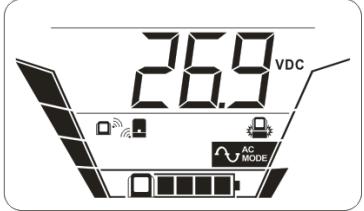
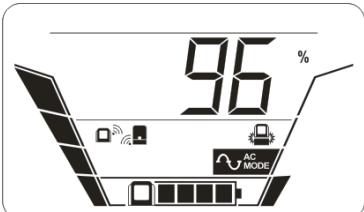
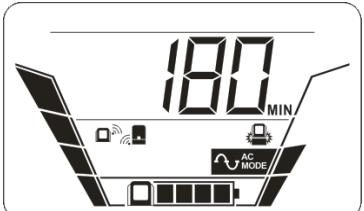
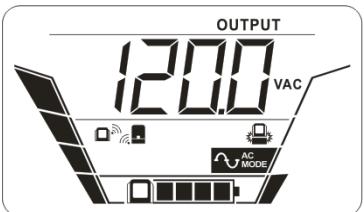
8. Operation

Program	Description	Selectable option	
	Color1 RGB LED Bottom Bank	Red	1Ed
		Yellow	1YEL
		Aqua	1R9U
		Purple	1PUR
		Others	10tH
	Color2 RGB LED Bottom Bank	Red	2Ed
		Yellow (default)	2YEL
		Aqua	2R9U
		Purple	2PUR
		Others	20tH
	On-Off Eco Mode	Eco Mode On	ECOn
		Eco Mode Off (default)	ECOf

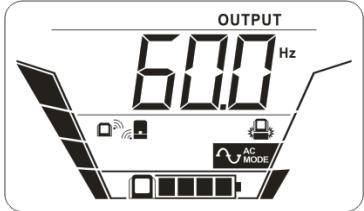
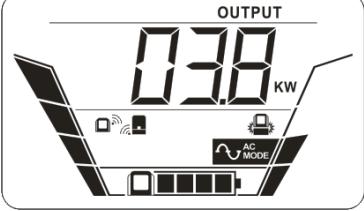
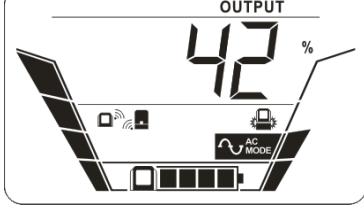
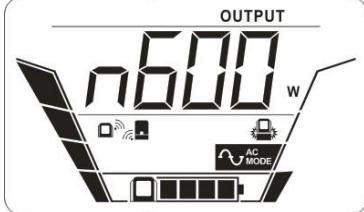
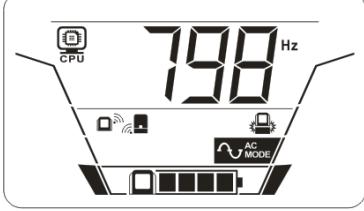
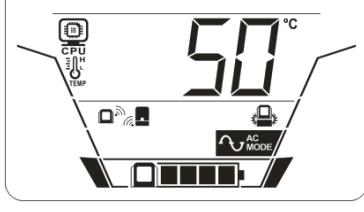
8. Operation

Display Setting

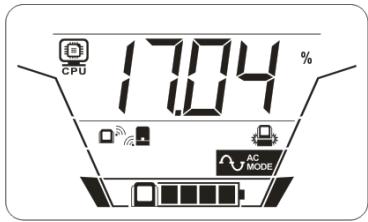
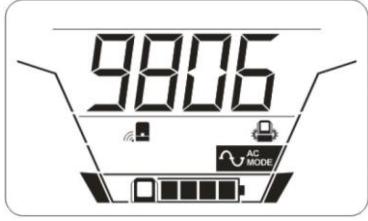
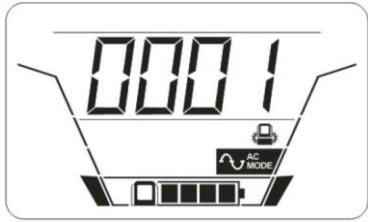
The LCD information will be switched in turns by pressing the "Up/Down" button. The selectable information is switched in this order: input voltage, input frequency, battery voltage, battery capacity, estimated backup time, output voltage, output frequency, output in kW, output load percentage, master outlet power consumption, PC CPU frequency, PC CPU temperature, CPU utilization, panel board firmware version, base board firmware version and UPS control board firmware version.

Selectable Information	LCD Screen
Input Voltage	 The LCD screen displays "INPUT" at the top. In the center, the digital display shows "120" with "VAC" to its right. Below the display, there are several icons: a battery, a Wi-Fi signal, a signal strength, a battery percentage, and an "AC MODE" button. At the bottom, there is a battery icon with a progress bar.
Input frequency	 The LCD screen displays "INPUT" at the top. In the center, the digital display shows "60" with "Hz" to its right. Below the display, there are several icons: a battery, a Wi-Fi signal, a signal strength, a battery percentage, and an "AC MODE" button. At the bottom, there is a battery icon with a progress bar.
Battery voltage	 The LCD screen displays "INPUT" at the top. In the center, the digital display shows "26.9" with "VDC" to its right. Below the display, there are several icons: a battery, a Wi-Fi signal, a signal strength, a battery percentage, and an "AC MODE" button. At the bottom, there is a battery icon with a progress bar.
Battery Capacity	 The LCD screen displays "INPUT" at the top. In the center, the digital display shows "96" with "%" to its right. Below the display, there are several icons: a battery, a Wi-Fi signal, a signal strength, a battery percentage, and an "AC MODE" button. At the bottom, there is a battery icon with a progress bar.
Estimated Backup Time	 The LCD screen displays "INPUT" at the top. In the center, the digital display shows "180" with "MIN" to its right. Below the display, there are several icons: a battery, a Wi-Fi signal, a signal strength, a battery percentage, and an "AC MODE" button. At the bottom, there is a battery icon with a progress bar.
Output Voltage	 The LCD screen displays "OUTPUT" at the top. In the center, the digital display shows "120" with "VAC" to its right. Below the display, there are several icons: a battery, a Wi-Fi signal, a signal strength, a battery percentage, and an "AC MODE" button. At the bottom, there is a battery icon with a progress bar.

8. Operation

Selectable Information	LCD Screen
Output Frequency	
Output in kW	
Output Load in Percent	
Master Outlet Power Consumption	
PC CPU Frequency	
PC CPU Temperature	

8. Operation

Selectable Information	LCD Screen
CPU Utilization	
Panel Board Firmware Version	
Base Board Firmware Version	
UPS Control Board Firmware Version	

9. Trouble Shooting

When there is a fault, error, warning, or alarm, both the front and bottom LED banks will flash red. If the UPS system does not operate correctly, use the following table to identify the problem.

Problem/Fault code	Possible Cause/Fault Event	Solutions
UPS will not turn on after pressing On/Off button.	Releasing the On/Off button too quickly.	Press and hold the “On/Off” button for at least 2 seconds, then release.
The mains supply is normal, but the UPS is operating in battery mode.	Power cord is loose.	Reconnect AC input power cord.
	Circuit breaker has tripped.	Reset the input circuit breaker. If the input circuit breaker trips after the UPS restarts, remove excess loads from the UPS.
The AC normal icon is illuminated, but there is no output.	The UPS has an internal fault.	Disconnect the computer cable from the UPS and press the On button. If UPS functions normally, the software has control of the UPS.
Battery backup time is shorter than nominal value.	Batteries are not fully charged.	Charge the batteries for at least 5 hours, then check capacity. If the problem persists, contact your dealer.
	Battery defect.	Contact your dealer to replace the battery.
Fault code E12 and  icon is on.	Output voltage is too high on battery mode.	Contact your dealer.
Fault code E13 and  icon is on.	Output voltage is too low on battery mode	Contact your dealer.
Warning code E32 and  icon is flashing.	Communication lost between UPS and Base.	Contact your dealer.
Warning code E32 and  icon flashes.	The distance between remote panel and the docking base is out of wireless transmission range.	Reduce the distance between the remote panel and the docking base.
	Error occurs with the pairing password.	Quick-press the “On/Off” button 5 times to reset pairing, then connect the remote panel to the docking base.
Fault code E14 and  icon is on.	Output is short-circuited.	Check if connected devices are in short-circuit status. Disconnect short-circuited loads and restart the UPS.
Fault code E15 and  icon is on.	Overcurrent on output.	Reduce the connected load by switching off some equipment.
Fault code E20 and  icon is on	Fan lock fault.	Contact your dealer.
Fault code E21	Overcharge voltage	Contact your dealer.
Fault code E28 and  icon is on	Low battery voltage.	The battery requires replacement. If the fault still occurs after battery replacement, contact your dealer.
Fault code E43 and  icon is on	Overload fault	Contact your dealer.
 icon is illuminate and the alarm sounds continuously.	The UPS has an internal problem.	Contact your dealer.

10. Specifications

Model	SMART600PSGLCD	SMART1000PSGLCD
Capacity	600 VA / 360 W	1000 VA / 600 W
Input Voltage	110/120 VAC	
Input Voltage Range	97~145 VAC	
Output Voltage Regulation	+/-10%	
Transfer Time	Typical 6 ms, 10 ms max.	
Waveform	Pure Sine Wave	
Battery Type & Number	12 V/7 AH x 1	12 V/9 AH plus x 1
Charging Time	6-8 hours to recover to 90% capacity	
Dimension (H x W x D)	11 x 4.1 x 12.1 in. 280 x 105 x 308 mm	11 x 4.1 x 12.1 in. 280 x 105 x 308 mm
Net Weight	16.5 lb. 7.5 kg	17.6 lb. 8 kg
Humidity	0-90% RH @ 0-40°C (non-condensing)	
Noise Level	Less than 40 dB @ 1 meter	Less than 40 dB @ 1 meter

Model	SMART1200PSGLCD	SMART1500PSGLCD
Capacity	1000 VA / 600 W	1500 VA / 900 W
Input Voltage	110/120 VAC	
Input Voltage Range	97~145 VAC	
Output Voltage Regulation	+/-10%	
Transfer Time	Typical 6 ms, 10 ms max.	
Waveform	Pure Sine Wave	
Battery Type & Number	12 V/7 AH x 2	12 V/9 AH x 2
Charging Time	6-8 hours to recover to 90% capacity	
Dimension (H x W x D)	11 x 4.1 x 16.9 in. 280 x 105 x 430 mm	11 x 4.1 x 16.9 in. 280 x 105 x 430 mm
Net Weight	22 lb. 10 kg	29.3 lb. 13.3 kg
Humidity	0-90% RH @ 0-40°C (non-condensing)	
Noise Level	Less than 45 dB @ 1 meter	Less than 45 dB @ 1 meter

*Specifications are subject to change without further notice.

11. Storage and Service

Storage

To avoid battery drain, all connected equipment should be turned off and disconnected from the UPS. Press the power button and disconnect the unit from AC power. Your UPS will be completely turned off (deactivated) and will be ready for storage. If you plan on storing your UPS for an extended period, fully recharge the UPS batteries every 3 months. Plug the UPS into a live AC outlet, and allow the batteries to recharge for 4 to 6 hours. If you leave your UPS batteries discharged for a long period of time, they will suffer a permanent loss of capacity.

Service

A variety of Extended Warranty and On-Site Service Programs are available from Tripp Lite. For more information on service, visit tripplite.com/support.

Before returning your product for service, follow these steps:

1. Review the installation and operation procedures in this manual to ensure that the service problem does not originate from a misreading of the instructions.
2. If the problem continues, do not contact or return the product to the dealer. Instead, visit tripplite.com/support.
3. If the problem requires service, visit tripplite.com/support and click the Product Returns link. From here you can request a Returned Material Authorization (RMA) number, which is required for service. This simple on-line form will ask for your unit's model and serial numbers, along with other general purchaser information. The RMA number, along with shipping instructions, will be emailed to you. Any damages (direct, indirect, special or consequential) to the product incurred during shipment to Tripp Lite or an authorized Tripp Lite service center is not covered under warranty. Products shipped to Tripp Lite or an authorized Tripp Lite service center must have transportation charges prepaid. Mark the RMA number on the outside of the package. If the product is within its warranty period, enclose a copy of your sales receipt. Return the product for service using an insured carrier to the address given to you when you request the RMA.

12. Product Registration

Visit tripplite.com/warranty today to register your new Tripp Lite product. You'll be automatically entered into a drawing for a chance to win a FREE Tripp Lite product! *

* No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

13. Regulatory Compliance

FCC Notice, Class B

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications to this equipment not expressly approved by Tripp Lite could void the user's authority to operate this equipment.

RF exposure warning

The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment.

The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada, Industry Canada (IC) Notices

This device complies with Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Canada, avis d'Industry Canada (IC)

Cet appareil est conforme avec Industrie Canada exemptes de licence RSS standard(s).

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the IC RF Exposure limits under portable exposure conditions. (antennas are less than 20 cm of a person's body).

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils portables. (les antennes sont moins de 20 cm du corps d'une personne).

Innovation, Science and Economic Development Canada CS-03 Statement

- This product meets the applicable Innovation, Science and Economic Development Canada technical specifications
- The Ringer Equivalence Number (REN) indicates the maximum number of devices allowed to be connected to a telephone interface. The termination of an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices not exceed five.
- The Ringer Equivalence Number (REN) is 0.1.

Déclaration de conformité

- Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.
- L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de dispositifs qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme des IES de tous les dispositifs n'excède pas cinq.
- Le nombre d'équivalence de sonnerie (REN) est 0.1.

Regulatory Compliance Identification Numbers

For the purpose of regulatory compliance certifications and identification, your Tripp Lite product has been assigned a unique series number. The series number can be found on the product nameplate label, along with all required approval markings and information. When requesting compliance information for this product, always refer to the series number. The series number should not be confused with the marking name or model number of the product.

Tripp Lite has a policy of continuous improvement. Product specifications are subject to change without notice.



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