# TRIPP-LITE OMNI700LCDT UPS Systems Owner's Manual



Contents



**TRIPP-LITE OMNI700LCDT UPS Systems**


## Important Safety Instructions

This manual contains instructions and warnings that should be followed during the installation, operation and storage of this product. Failure to heed these warnings may affect the warranty.

### UPS Location Warnings

- Install your UPS indoors, away from excess moisture or heat, conductive contaminants, dust or direct sunlight.
- For best performance, keep the indoor temperature between 32º F and 104º F (0º C and 40º C).
- Leave adequate space around all sides of the UPS for proper ventilation.
- Only set the UPS upright on a sturdy flat surface. Do not block fans or ventilation holes, as this will seriously inhibit the unit’s internal cooling and cause product damage not covered under warranty.

### UPS Connection Warnings

- Connect your UPS directly to a properly-grounded AC power outlet. Do not plug the UPS into itself; this will damage the UPS.
- Do not modify the UPS plug, and do not use an adapter that would eliminate the UPS ground connection.
- Do not use extension cords to connect the UPS to an AC outlet.
- If the UPS receives power from a motor-powered AC generator, the generator must provide clean, filtered, computer-grade output.
- The mains socket outlet that supplies the UPS should be easily accessible and located near the UPS.

### Equipment Connection Warnings

Install in accordance with National Electrical Code standards ANSI/NFPA 70 and Canadian Electrical Code, Part I, C22.1.
Short-circuit backup protection and overcurrent protection is provided by the building installation.
To reduce the risk of fire, connect only to a circuit-provided branch circuit overcurrent protection in accordance

with the National Electrical Code, ANSI/NFPA 70 and the Canadian Electrical Code, Part I, C22.1. The plug on the power supply cord is intended to serve as the disconnect device. Be sure that the socket outlet is installed near the equipment and is made easily accessible.

- Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended.
- Do not connect surge protectors or extension cords to the output of your UPS. This might damage the UPS and may affect the surge protector and UPS warranties.
- Connect the UPS to an outlet that is adequately protected against excess currents, short circuits and earth faults as part of the building installation.

**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. Tripp Lite offers a complete line of UPS System Replacement Battery Cartridges (R.B.C.).Visit Tripp Lite on the Web at tripplite.com/products/battery-finder to locate the specific replacement battery for your UPS.

**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:

- Remove watches, rings or other metal objects.
- Use tools with insulated handles.
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect charging source and load prior to installing or maintaining the battery.
- Remove battery grounds during installation and maintenance to reduce likelihood of shock.
- Remove the connection from ground if any part of the battery is determined to be grounded.

**UPS and Battery Recycling**

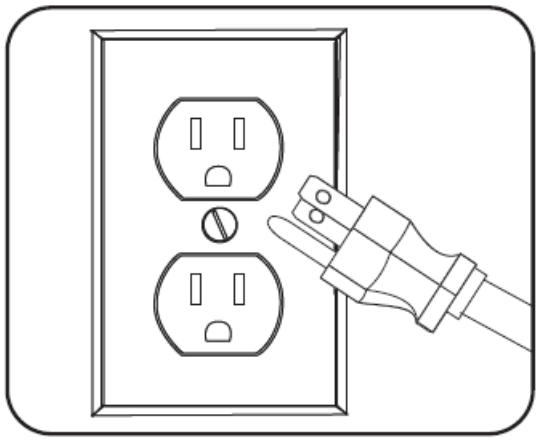
Tripp Lite products use sealed lead-acid batteries, which are highly recyclable.
Call Tripp Lite at 1.773.869.1234 or visit **tripplite.com/support/recycling-program** for more information on recycling the batteries or any other Tripp Lite product. Please refer to local codes for disposal requirements.

## Quick Installation

STEP 1: Plug the UPS into a properly grounded outlet.

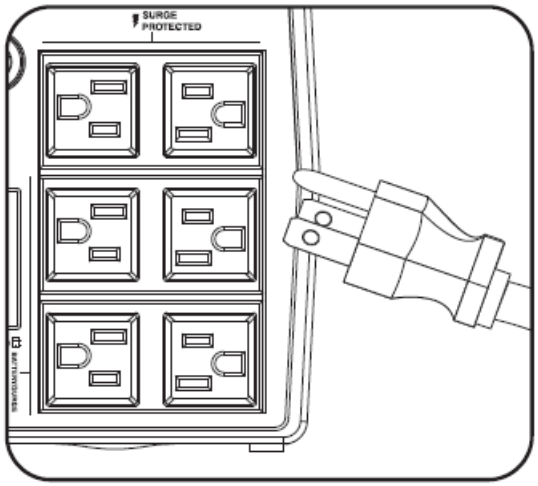
After plugging the UPS into a wall outlet, press the power button  to turn on the UPS (See Basic Operation).

**Note:** The UPS will not turn on automatically in the presence of live utility power.



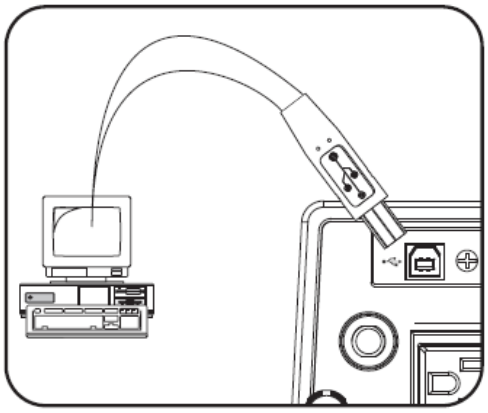
**STEP 2: Plug your equipment into the UPS.**
There are two sets of outlets on the back of your UPS. Outlets marked SURGE PROTECTED do not provide battery backup power during power outages. Connect common desktop items like printers, scanners and other accessories not requiring battery support to these outlets. Outlets marked BATTERY/SURGE PROTECTED offer UPS battery backup support during power failures. Connect your vital computer equipment into these outlets.

Your UPS is designed to support electronic equipment only. You will overload the UPS if the total volt-amp (VA) ratings for all the equipment connected to the BATTERY/SURGE-PROTECTED outlets exceed the UPS output capacity. To find your equipment's VA ratings, look on their nameplates. If the equipment is listed in amps (A), multiply the number of amps by 120 to determine VA. For example: 1A × 120 = 120VA.
If the color LCD panel does not illuminate when the UPS is turned ON, try the following:




1. Make sure that the UPS is plugged into a live AC outlet.
2. Press the power button to turn on the UPS. A beep should sound when the UPS starts.
3. If the UPS still does not start, contact Tripp Lite Tech Support for assistance.

**Optional Installation**
Both models include USB communication ports and tel/DSL/Ethernet surge protection jacks (not compatible with PoE applications). These connections are optional, as the UPS will work properly without these connections.



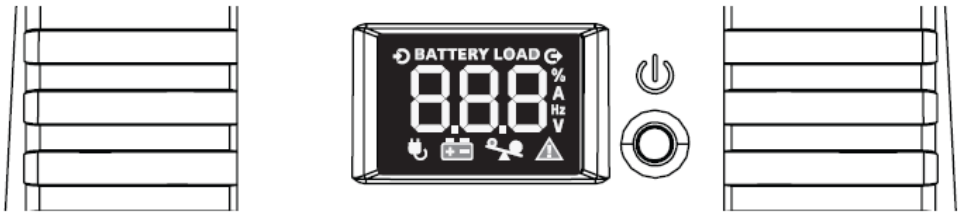
## Basic Operation

### UPS ON/OFF

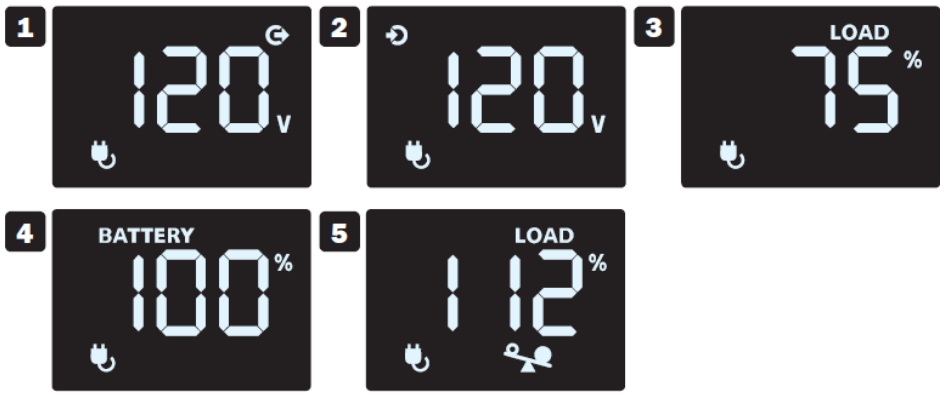
- Plug the UPS into a live, grounded outlet.
  The LCD panel will illuminate, the battery charger will engage as necessary and the SURGE PROTECTED outlets will begin passing power.
- Plug equipment into the UPS: You will overload the UPS if the total volt-amp (VA) ratings for all the equipment connected to the BATTERY/SURGE PROTECTED outlets exceed the UPS output capacity. To find your equipment's VA ratings, look on their nameplates. If the equipment is listed in amps (A), multiply the number of amps by 120 to determine VA. For example: 1A × 120 = 120VA.
- Turn the UPS on: Press the power button. The UPS alarm will beep once briefly. The BATTERY/SURGE PROTECTED outlets will begin passing AC line power. The UPS will automatically recharge internal batteries as needed. Once turned on, your UPS is ready to protect connected equipment from blackouts, brownouts, overvoltages and transient surges.
- Turn the UPS off: Press the power button.

**Note:** UPS system will function properly upon initial startup; however, maximum runtime for the unit's battery will only be accessible after it has been charged for 24 hours.

### Display UPS/Power Conditions



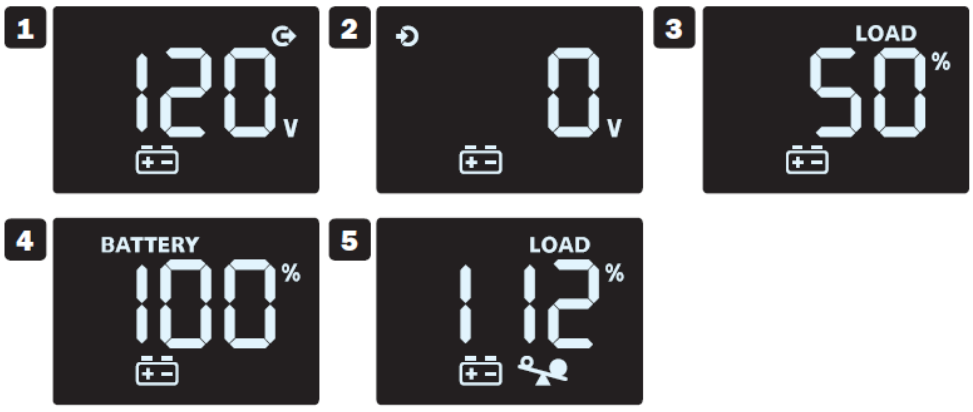

**On-Line AC Power Mode LCD Data**
The LCD touchscreen offers five screens of UPS and site power information when the UPS is operating in on-line power mode. To advance to the next screen, touch the LCD.




1. Output Voltage
2. Input Voltage
3. Load %
4. Battery Charge Level
5. Overload

| **Operating Mode** | | **Alarm Description** |
|---|---|---|
| Battery Mode | Normal | No Alarm |
| | Battery Low | Sounds Every Second |
| | Over Load | Sounds Every 0.5 Second |
| Line Mode | Normal | No Alarm |
| | Over Load | Sounds Every 0.5 Second |
| | Battery Replace | Sounds Every Minute |
| Fault Mode | | Sounds Continuously |

**Battery Power Mode LCD Data**
The LCD touchscreen offers five screens of UPS and site power information when the UPS is operating in battery power mode. When the UPS switches to BATTERY MODE, the UPS will automatically switch to displaying the following screens. To advance to the next screen, touch the LCD.




1. Output Voltage
2. Input Voltage
3. Load %

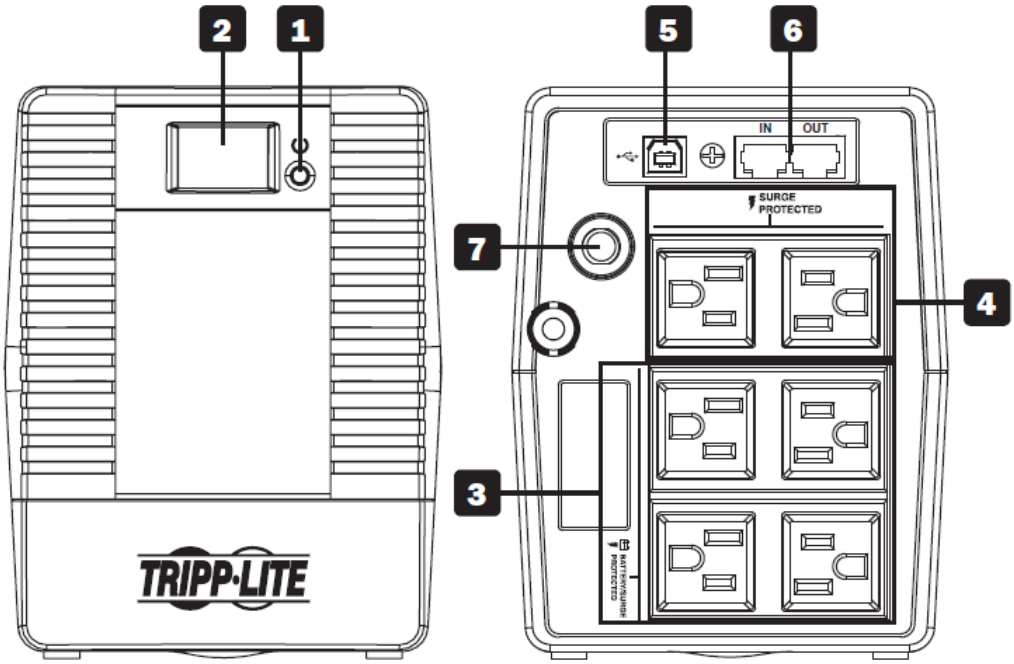
4. Battery Charge Level
5. Overload

### Critical Fault Screens


| Error Code | Critical Fault | Solution |
|---|---|---|
| F01 | OUTPUT SHORT | Disconnect load(s) from UPS outlets. Power off UPS and contact Tri pp Lite Technical Support for assistance. |
| F02 | OVER LOAD | Remove excess load, check load meter on LCD for load status. |
| F03 | OVER CHARGE | Turn unit off, unplug UPS and contact Tripp Lite Technical Support f or assistance. |
| F04 | BATTERY LOW VOLTA GE | Charge UPS for 24 hours. If problem persists, replace battery and c ontact Tripp Lite Technical Support if problem persists. |
| F05 | BATTERY MODE HIGH OUTPUT | Turn off power to the UPS and contact Tripp Lite Technical Support f or assistance. |

## Features

### UPS Features




1. **ON/OFF Button:** When the UPS is on, press and release this button after one beep to turn the UPS off.
2. **LCD Touchscreen Panel:** Provide current status of the UPS. For a detailed description, refer to “Display UPS/Power Conditions” in the Basic Operation section.
3. **Battery Backup/Surge Protected Outlets:** These outlets offer battery backup support and premium surge

suppression for critical devices requiring battery backup support.

4. **Surge Protected Outlets:** These outlets offer premium surge suppression for critical devices.
5. **USB Communication Port:** This port can connect your UPS to any computer for automatic saves and unattended shutdown in the event of a power failure. Use with Tripp Lite's PowerAlert® Software (available as a FREE download at www.tripplite.com) and the USB cable included with your UPS. This connection is optional, your UPS will work properly without this connection.

   **Note:** This UPS System provides basic communication compatibility with most integrated Windows®, Macintosh® and Linux® power management applications.
6. Tel/DSL/Ethernet Line Protection Jacks: These jacks protect equipment against surges over a single phone line or network connection. Connecting your equipment to these jacks is optional; your UPS will work properly without this connection.

   **Note:** Not compatible with PoE (Power over Ethernet) applications.
7. Resettable Input Circuit Breaker: Protects your electrical circuit from overcurrent draw from the UPS load. If this breaker trips, remove some of the load, then reset by pressing it in.

#### Battery Replacement

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

The OMNI700LCDT and OMNISMART500TU require one 12V DC, 9AH replacement battery.
For further information about replacement compatibility and ordering, visit **www.tripplite.com/products/battery-finder**.

Battery replacement must be done using the same battery type and quantity: 12V DC sealed lead-acid, 6-cell and in compliance with UL 1989.
**CAUTION:** Risk of energy hazard. Before replacing batteries, remove conductive jewelry such as chains, wristwatches and rings. High energy passing through conductive materials may cause severe burns.

## Specifications

| Model | OMNI700LCDT | OMNISMART500TU |
|---|---|---|
| Nominal input voltage(s) and range | 120V~, 89-145V~ | 120V~, 89-145V~ |
| Nominal input frequency and tolera nce | 50/60 Hz (+/- 5 Hz) | 50/60 Hz (+/- 5 Hz) |
| Nominal output voltage | 120V~ sinusoidal in line mode and 120V~ PWM in battery mode | 120V~ sinusoidal in line mode and 120V~ PWM in battery mode |
| Nominal output frequency | 50/60 Hz (+/-0.5 Hz) | 50/60 Hz (+/-0.5 Hz) |
| Output voltage regulation in line-m ode | 120 V~ (+9% / – 12%) | 120 V~ (+9% / – 12%) |
| Output voltage regulation in battery mode | 120V~ (+/-10%) | 120V~ (+/-5%) |
| Nominal output power in W / VA | 350W / 700VA | 360W / 500VA |
| Output voltage waveform | Sinusoidal in line mode and quasi-s ine (PWM) in battery mode | Sinusoidal in line mode and quasi-s ine (PWM) in battery mode |
| Maximum output current @ | 5.8A @ 120V~ | 4.2A @ 120V~ |
| P.F. | P.F. = 0.5 | P.F. = 0.72 |
| Efficiency with nominal load | 95% | 95% |
| Maximum operating altitude at 100 % of nominal power | 6561 ft. (2000 m) above sea level | 6561 ft. (2000 m) above sea level |
| Online overload capability | 110% @ 5 minutes | 110% @ 5 minutes |

| Model | OMNI700LCDT | OMNISMART500TU |
|---|---|---|
| Overload capacity in battery mode | 110% @ 5 minutes | 110% @ 5 minutes |
| Current limitation | Both 10A | Input 7A Output 6A |
| Autonomy time at full load | 3 minutes @ 350W | 3 minutes @ 360W |
| Battery recharge time | 8 hours | 8 hours |
| Transfer time | 6 milliseconds typical (6 milliseconds max) | 6 milliseconds typical (6 milliseconds max) |
| Outlets | 4x 5-15R outlets with battery backu p, regulation and surge; 2x 5-15R o utlets only for surges | 4x 5-15R outlets with battery backu p, regulation and surge; 2x 5-15R o utlets only for surges |
| Maximum input current | 10A | 6A |

**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 three months. Plug the UPS into a live AC outlet, turn it on by pressing the power button 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.

**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.

**Regulatory Compliance**

**FCC Part 68 Notice (United States Only)**
If your Modem/Fax Protection causes harm to the telephone network, the telephone company may temporarily discontinue your service. If possible, they will notify you in advance. If advance notice isn't practical, you will be notified as soon as possible. You will be advised of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper operation of your equipment. If it does, you will be given advance notice to give you an opportunity to maintain uninterrupted service. If you experience trouble with this equipment's Modem/Fax Protection, please visit www.tripplite.com/support for repair/warranty information. The telephone company may ask you to disconnect this equipment from the network until the problem has been corrected or you are sure the equipment is not malfunctioning. There are no repairs that can be made by the customer to the Modem/Fax Protection. This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs. (Contact your state public utility commission or corporation commission for information.)

**Regulatory Compliance**

**FCC Notice, Class A**
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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**WARNING:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Equipment Attachment Limitations (models with the Industry Canada label in Canada only)

**NOTICE:** The Industry Canada label identifies certified equipment. This certification means that the equipment meets the telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements Document(s). The Department does not guarantee the equipment will operate to the user's satisfaction. Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that the compliance with the above conditions might not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.
Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. Caution: Users should not attempt to make connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

**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. Photos and illustrations may differ slightly from actual products.

Note on Labeling
Two symbols are used on the label. V~ : AC Voltage
V : DC Voltage

1111 W. 35th Street, Chicago, IL 60609 USA
**tripplite.com/support**

## Documents / Resources

| | |
|---|---|
|  | TRIPP-LITE OMNI700LCDT UPS Systems [pdf] Owner's Manual<br>OMNI700LCDT, OMNISMART500TU, OMNI700LCDT UPS Systems, OMNI700LCDT, UPS Systems, UPS |

## References

- Eaton - Power and Connectivity Solutions
- UPS Battery Finder | Eaton
- Help Center | Eaton
- Tripp Lite | Tripp Lite
- UPS & Battery Recycling | Eaton
- Product Registration | Eaton
- Eaton - Power and Connectivity Solutions
- UPS Battery Finder | Tripp Lite