



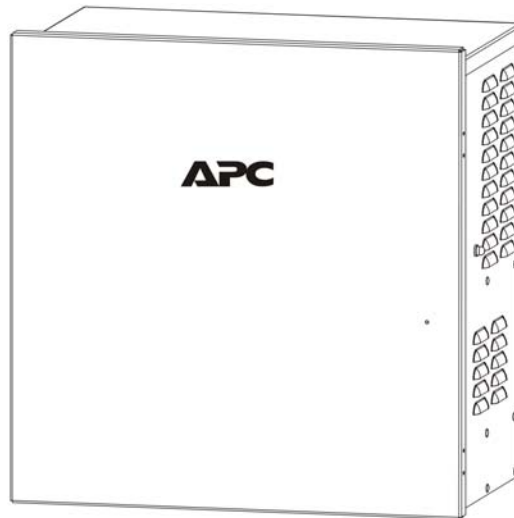
Broadband CTEP/G Series

Zero, Three, Six Battery Pole/Ground Mount Enclosures

Four, Eight Battery Pole Mount Enclosures

120 V/240 V

User Manual



990-5520B 05/2004

Chapter 1 General Information

The CTEP/G Series Enclosures provide power sourcing for broadband cable operations.

Safety

This Safety Guide contains important instructions that should be followed during installation and maintenance of the APC equipment and batteries. It is intended for APC customers who setup, install, relocate, or maintain APC equipment.

Only trained service personnel should install and maintain the power supply enclosure.

Changes and modifications to this unit not expressly approved by APC could void the warranty.

Failure to observe these warnings may result in serious injury, death or damage to the equipment.

Electrical Warnings

Do not work alone under hazardous conditions.

Do not handle any metallic connector before the power has been disconnected.

Servicing this equipment may require working with protective covers removed and utility power connected. Use extreme caution during these procedures.

High current through conductive materials could cause severe burns.

When grounding cannot be verified, disconnect the equipment from the utility power outlet before installing or connecting to other equipment. Reconnect the power cord only after all connections are made.

Check that the power cord(s), plug(s), and sockets are in good condition.

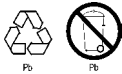
Replacement of fuses or other parts must be with identical types and ratings. Substitution of nonidentical parts may cause safety and fire hazards.

Battery Warnings

Always replace batteries with same or equivalent type recommended by the manufacturer.

Danger of explosion if battery is incorrectly connected or replaced.

Batteries present a risk of electrical shock and burns from high current in the event of a short-circuit. Observe proper safety precautions.



Batteries must be recycled. Deliver the battery to an appropriate recycling facility or ship it to the supplier in the new battery packing material.

Overhead Warnings

Never stand underneath a unit while it is hoisted. Always wear a hard hat.

Lifting Warnings

Modules are heavy. Use proper lifting techniques and equipment to avoid injury.

Chapter 2 Installation

Prior to installing the power supply enclosure, a utility breaker box must be installed on the pole. Utility line voltage must be routed to the enclosure. Local, state, federal and/or National Electric Code (NEC) regulations regarding location, permits and electrical wiring must be adhered to.

Do not operate the power supply where the temperature and humidity are outside the specified limits. See *Specifications* in this manual.

Models Supported

Model Number	Description
CTEP0-120	Encl, Pole 0 Batt 20 A, 120 Vac, 60 Hz
CTEP3-120	Encl, Pole 3 Batt 20 A, 120 Vac, 60 Hz
CTEP3-120GI	Encl, Pole 3 Batt 20 A, 120 Vac, 60 Hz with Generator Interface
CTEP3-240	Encl, Pole 3 Batt 20 A, 240 Vac, 60 Hz
CTEP4-120	Encl, Pole 4 Batt 20 A, 120 Vac, 60 Hz
CTEP4-120GI	Encl, Pole 4 Batt 20 A, 120 Vac, 60 Hz with Generator Interface
CTEP4-240	Encl, Pole 4 Batt 20 A, 240 Vac, 60 Hz
CTEP4-240GI	Encl, Pole 4 Batt 20 A, 240 Vac, 60 Hz with Generator Interface
CTEP6-120	Encl, Pole 6 Batt 20 A, 120 Vac, 60 Hz
CTEP6-120GI	Encl, Pole 6 Batt, 20 A, 120 Vac, 60 Hz with Generator Interface
CTEP8-120	Encl, Pole 8 Batt 20 A, 120 Vac, 60 Hz
CTEP8-120GI	Encl, Pole 8 Batt, 20 A, 120 Vac, 60 Hz with Generator Interface
CTEP8-240	Encl, Pole 8 Batt 20 A, 240 Vac, 60 Hz
CTEP8-240GI	Encl, Pole 8 Batt, 20 A, 240 Vac, 60 Hz with Generator Interface
CTEG0-120	Encl, Ground 0 Batt 20 A, 120 Vac, 60 Hz
CTEG3-120	Encl, Ground 3 Batt 20 A, 120 Vac, 60 Hz
CTEG3-240	Encl, Ground 3 Batt 20 A, 240 Vac, 60 Hz
CTEG6-120	Encl, Ground 6 Batt 20 A, 120 Vac, 60 Hz
CTEG6-120GI	Encl, Ground 6 Batt, 20 A, 120 Vac, 60 Hz with Generator Interface

Specifications

Environmental Specifications

Operating Temperature	-40° F to 140° F (-40° C to 60° C)
Humidity	5% to 95% noncondensing within enclosure

Physical Specifications

Characteristic	Specification
<i>Height X Width X Depth</i> CTEP0 CTEP3 CTEP4 CTEP6 CTEP8	14" x 24" x 16" (36 x 61 x 41 cm) 30" x 24" x 16" (76 x 61 x 41 cm) 27" x 29" x 18" (67 x 72 x 45 cm) 39" x 24" x 16" (99 x 61 x 41 cm) 38" x 29" x 18" (96 x 72. x 45 cm)
<i>Height X Width X Depth</i> CTEG0 CTEG3 CTEG6	22" x 24" x 16" (56 x 61 x 41 cm) 38" x 24" x 16" (97 x 61 x 41 cm) 47" x 24" x 16" (119 x 61 x 41 cm)
<i>Weight</i> CTEP/G0 CTEP/G3 CTEP4 CTEP/G6 CTEP8	23 lbs (10 kg) 50 lbs (23 kg) 78 lbs (34.5 kg) 77 lbs (35 kg) 140 lbs (63.6 kg)

Unpacking

Inspect the unit upon receipt. Notify the carrier if there is damage.

The packaging is recyclable; save it for reuse or dispose of it properly.

Check the package contents. The package contains the enclosure, battery cables, connectors and associated hardware, and product documentation.

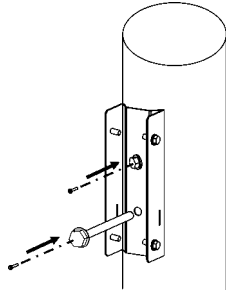
CTEP/G3: (5 cables)	15" black battery jumpers (2), 24" black (1), 27" red (2), 34" red (1)
CTEP/G6: (9 cables)	15" black battery jumpers (4), 25" black (1), 40" black (1), 60" black (1), 27" red (1), 34" red (1)
CTEP4: (6 cables)	15" black battery jumpers (3), 30" black (1), 27" red (2), 40" red (1)
CTEP8: (11 cables)	15" black battery jumpers (6), 30" black (1), 40" black (1), 27" red (1), 40" red (1)

Installing the Enclosure

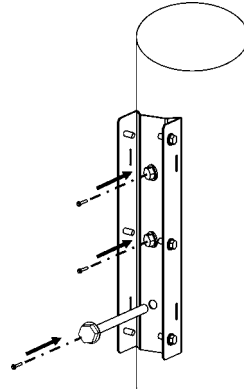
Models may vary in appearance from those depicted below.

Install the Mounting Bracket on a Pole

CTEP0/CTEP4 models

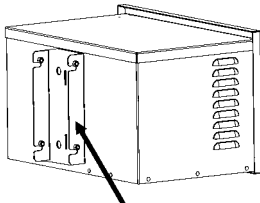


CTEP3/CTEP6/CTEP8 models



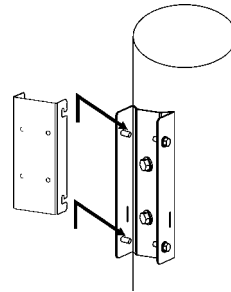
Install the Enclosure on the Mounting Bracket

CTEP0/CTEP4 models

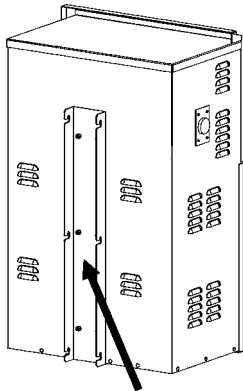


mounting bracket is permanently attached to enclosure

Secure the bolts, nuts, and washers on the mounted bracket prior to installing the enclosure.

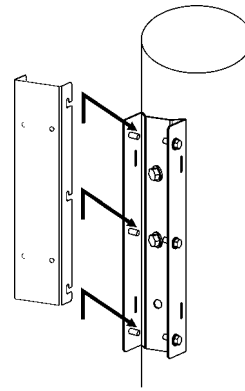


CTEP3/CTEP6/CTEP8 models



mounting bracket is permanently attached to enclosure

Secure the bolts, nuts, and washers on the mounted bracket prior to installing the enclosure.

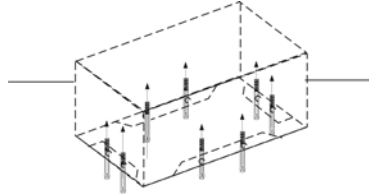


Ground Mount Installation

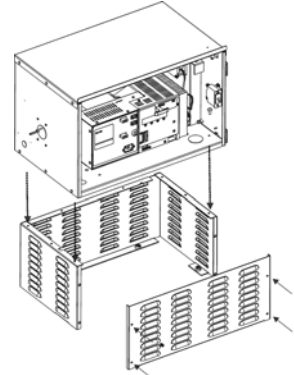
1. Install an APC approved concrete pad. Contact your dealer or refer to the APC Web site, www.apc.com for more information.
2. Secure the enclosure to the pad. Refer to the diagrams below.

0 Battery Enclosure:

Attach the ground skirt to the concrete pad.



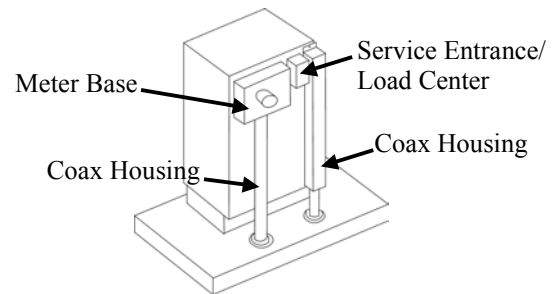
Attach the enclosure to the ground skirt.



3 Battery, 6 Battery Enclosures:

Place the enclosure on the pad. The holes on the enclosure must be aligned with the anchor hooks on the pad, (hardware not included).

This is a general representation of an enclosure mounted on a pad. Configurations may vary.



Wiring

Grounding

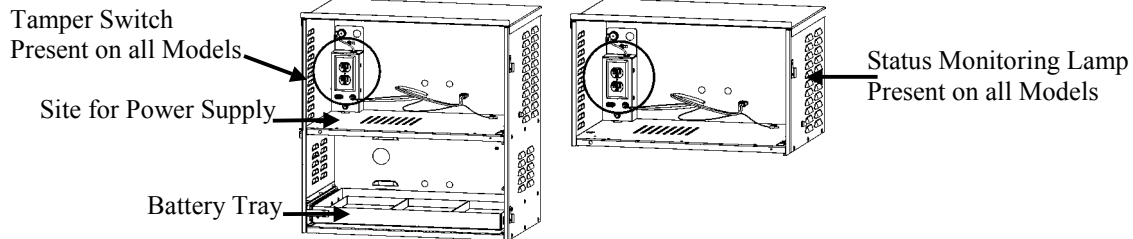
1. Install and interconnect ground rods appropriate for proper grounding according to local electrical code requirements.
2. Route ground wires from the ground system into the bus bar located on the enclosure.

Connecting Utility Power to the Enclosure

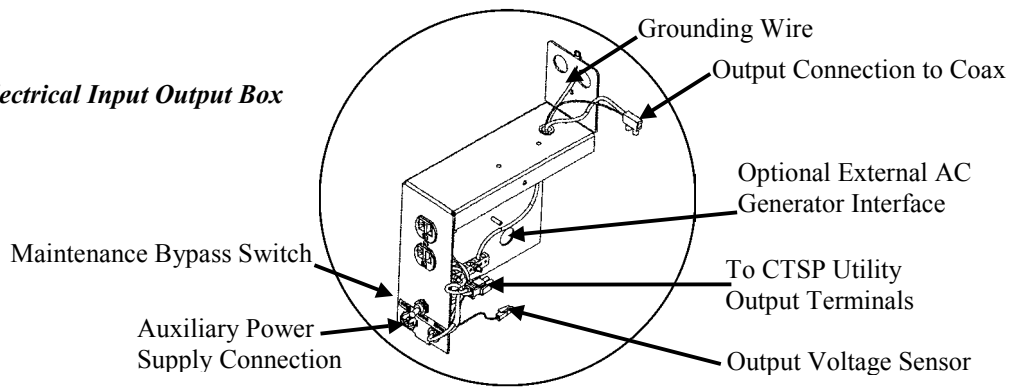
CTEP/G3

(CTEP/G6&CTEP8 have additional battery tray)

CTEP/G0



Electrical Input Output Box



1. Unlock and open the door of the enclosure.
2. Ensure that the utility power switch is OFF.
3. Install a high magnetic circuit breaker box
4. Using appropriate conduit connectors, run wires from the utility breaker box to the receptacle box inside the enclosure.
5. Connect the wires to the receptacle and install it in the enclosure.
6. Refer to the CTSP-EM User Manual for detailed installation instructions regarding the Interface Harness connections.

Options

An optional External AC Generator Interface is available for the following models:

CTEP3-120GI; CTEP4-120/240GI; CTEP/G6-120GI; CTEP8-120/240GI

For available options see your dealer or the APC Web site, www.apc.com.

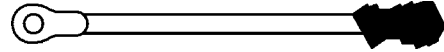
Connecting the Batteries



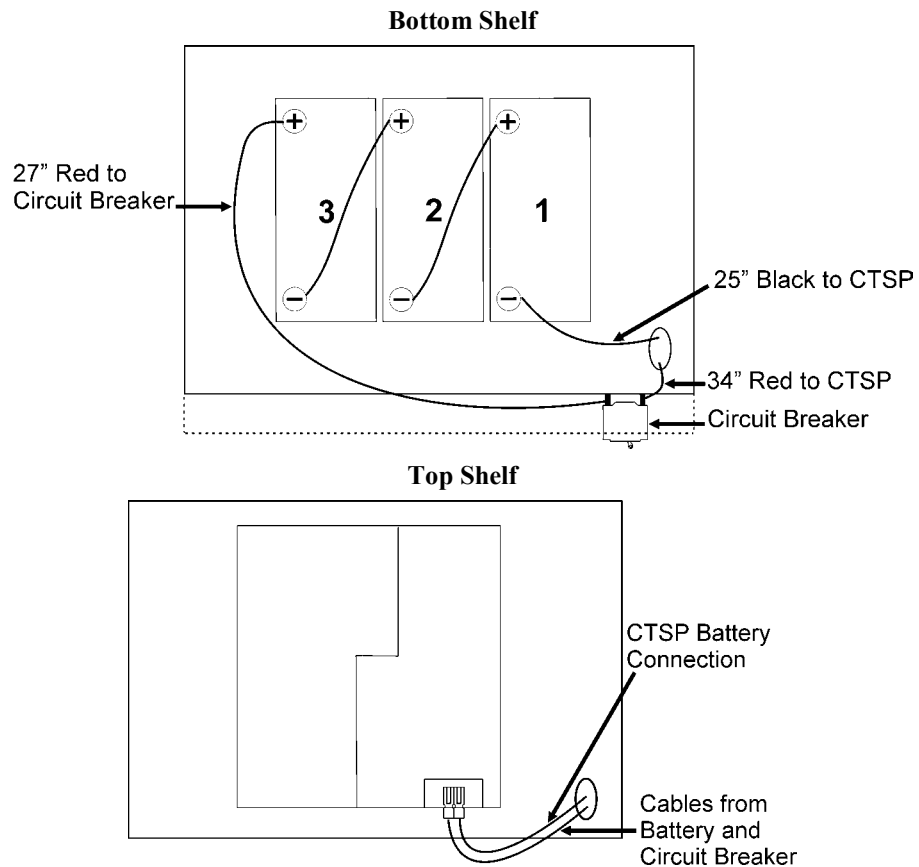
The battery circuit breaker must **OFF** prior to battery installation.

Use normal precautionary measures when wiring and connecting the batteries.

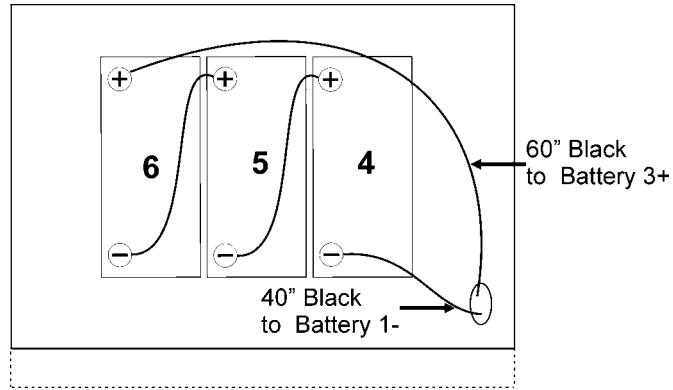
Tape one end of each jumper cable prior to installation.



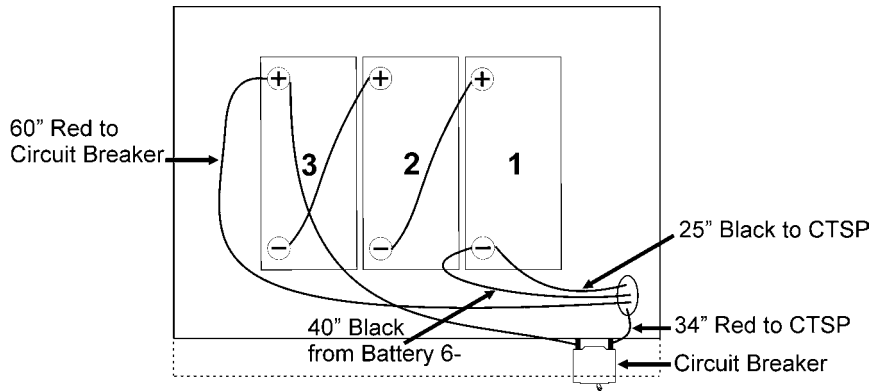
CTEP/G3



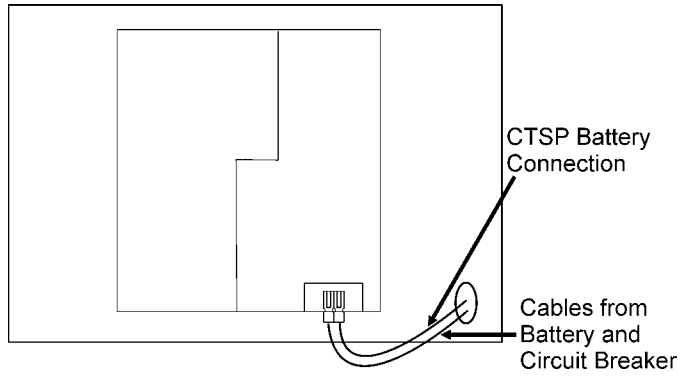
Bottom Shelf



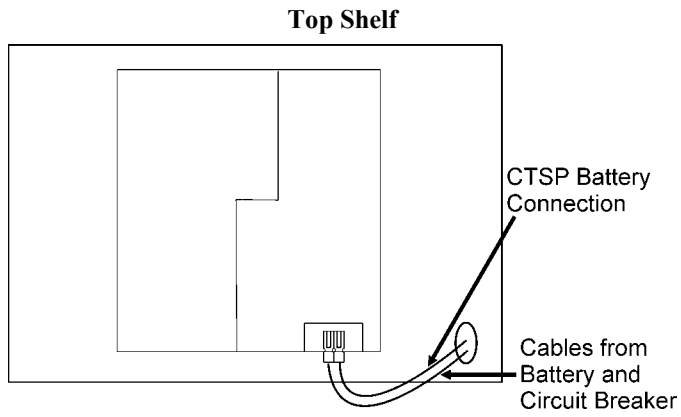
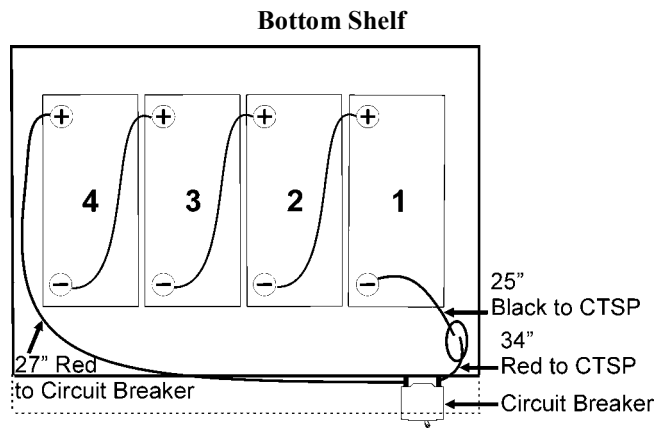
Middle Shelf



Top Shelf

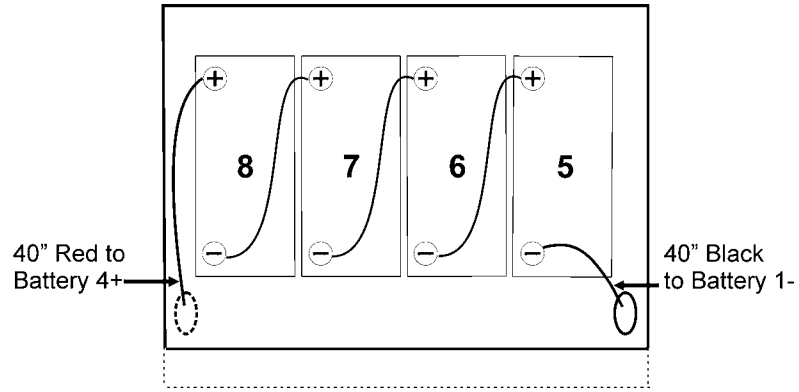


CTEP4

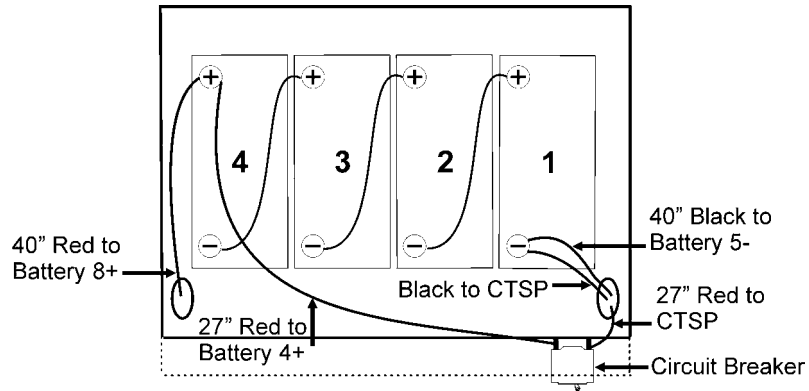


CTEP8

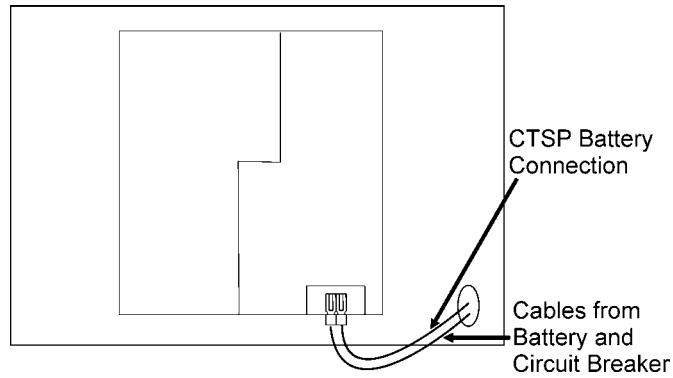
Bottom Shelf



Middle Shelf



Top Shelf



Chapter 3 Service, Contact and Warranty Information

Service

APC makes every effort to ensure parts and equipment arrive in working condition. Occasionally, it may be necessary to return parts or equipment that are not in working condition.

If the UPS requires service do not return it to the dealer. Follow these steps:

1. Contact APC Customer Service through the APC Web site, www.apc.com.
 - Note the product model number, the serial number, and the date purchased. If you call APC Customer Service, a technician will ask you to describe the problem and try to solve it over the phone. If this is not possible the technician will issue a Returned Material Authorization Number (RMA#).
 - If the product is under warranty, repairs are free. If not, there is a repair charge.
 - Procedures for servicing or returning products may vary internationally. Refer to the APC Web site for country specific instructions.
2. Pack the product in its original packaging. If the original packing is not available, refer to the APC Web site for information on obtaining appropriate packing materials.
 - Pack the unit properly to avoid damage in transit. Never use Styrofoam beads for packaging. Damage sustained in transit is not covered under warranty.
3. Mark the RMA# on the outside of the package.
4. Return the unit by insured, prepaid carrier to the address given to you by Customer Service.

How to Contact APC

In the USA ...	Outside the USA ...
Refer to the APC Web site, www.apc.com .	Refer to the APC Web site, www.apc.com . Select the appropriate country from the country selection field. Select the <i>Support</i> tab at the top of the web page.

Limited Warranty

American Power Conversion (APC) warrants its products to be free from defects in materials and workmanship for a period of two years from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products. To obtain service under warranty you must obtain a Returned Material Authorization (RMA) number from customer support. Products must be returned with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase.

EXCEPT AS PROVIDED HEREIN, AMERICAN POWER CONVERSION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL APC BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Specifically, APC is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties, or otherwise.

Regulatory Approval



EC Declaration of Conformity		Date of product declaration
<p>We, the undersigned, declare under our sole responsibility that the equipment specified below conforms to the following standards and directives:</p>		
<p>Standards to Which Conformity Declared: EN60950</p>	<p>Manufacturer's Name and Address: American Power Conversion Ballybritt Business Park Galway, Ireland</p>	<p>American Power Conversion Lot 3, Block 14, Phase 3 PEZA, Rosario, Cavite Philippines</p>
<p>Application of Council Directives: 73/23/EEC</p>	<p>American Power Conversion Breaffy Rd. Castelbar Co Mayo, Ireland</p>	<p>American Power Conversion 2nd Street PEZA, Cavite Economic Zone Rosario, Cavite Philippines</p>
<p>Type of Equipment: Power Supply</p>	<p>American Power Conversion 132 Fairgrounds Rd. West Kingston, RI 02892 USA</p>	<p>American Power Conversion Lot 10, Block 16, Phase 4 PEZA, Rosario, Cavite Philippines</p>
<p>Model Numbers: CTEP/G0; CTEP/G3; CTEP/G4; CTEP/G6; CTEP8</p>	<p>American Power Conversion 1600 Division Rd. West Warwick, RI, 02893, USA American Power Conversion 40 Catamore Blvd. East Providence, RI 02914 USA</p>	<p>APC Brasil LTDA. ALXingu, 850 Barueri Alphaville/Sao Paulo 06455-030 Brazil</p>
<p>Importer's Name and Address: American Power Conversion Ballybritt Business Park Galway, Ireland</p>	<p>APC India Pvt. Ltd. 187/3, 188/3, Jigani Industrial Area Bangalore, 562106 Karnataka India</p>	<p>APC (Suzhou) UPS Co., Ltd 339 Suihong Zhong Lu Suzhou Industrial Park Suzhou Jiangsu 2215021 P. R. China</p>
<p>Place: Ray S. Ballard Managing Director, Europe Galway, Ireland</p>	<p>5 Jan 04</p>	
<p>Place: Richard J. Everett Sr. Regulatory Compliance Engineer N. Billerica, MA USA</p>	<p>5 Jan 04</p>	

Entire contents copyright © 2004 by American Power Conversion Corporation. All rights reserved. Reproduction in whole or in part without permission is prohibited.

APC is a registered trademark of American Power Conversion Corporation. All other trademarks are the property of their respective owners.