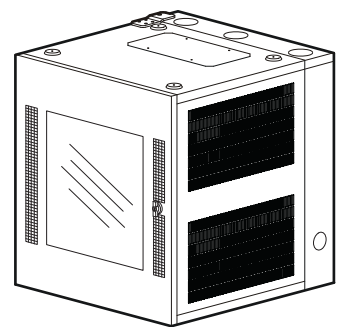


Unpacking, Installation, and Customization

NetShelter[™] WX Enclosure

AR100
AR100HD



Contents

- Unpacking..... 1**
 - How to Unpack the Enclosure1
 - Please Recycle 1
- Product Overview..... 2**
 - Description 2
 - NetShelter WX Enclosure 2
 - Disclaimer 2
- Inventory3**
 - Verify the inventory 3
 - Component Identification 3
- Configuration.....4**
 - Door locks 4
 - Cable access 4
 - Reversing the enclosure 5
 - Mounting rails 5
 - How to reverse the mounting rails 6
 - Adjusting the depth of the front mounting rails 7
- Installation 8**
 - Assembling the Enclosure.....8
 - Attaching the rubber feet 8
 - Mounting the Enclosure to a Wall9
 - Placing Equipment into the Enclosure9
 - Identifying one U-space 9
 - Installing equipment 10
 - How to install and remove a caged nut 10

Specifications	11
Two-Year Factory Warranty	12
Terms of warranty	12
Non-transferable warranty	12
Exclusions	12
Warranty claims	13

Unpacking

How to Unpack the Enclosure



Heavy: Use at least two people to move and unpack this equipment.

Move the shipping pallet to a firm, level surface. Inspect the packaging for signs of shipping damage.

1. If you detect any shipping damage, contact APC Customer Support at the number listed on the back cover of this manual.
2. Open the cardboard box and remove the four foam corner protectors.
3. With one person on each side of the enclosure, carefully lift the enclosure assembly out of the box and set it on the floor.



Note: Save the packaging if you intend to re-ship the enclosure.

Please Recycle



The shipping materials are recyclable. Save them for later use, or dispose of them appropriately.

Product Overview

Description

American Power Conversion (APC™) NetShelter™ 13-U Wall-Mount Enclosures (AR100, AR100HD) provide storage for industry-standard (EIA/ECA-310) 482-millimeter (19-inch) rack-mount hardware, including voice, data, networking, and internetworking equipment.

NetShelter WX Enclosure

Model	Rack Mounting Height	Rack Mounting Width	External Enclosure Width	Description
AR100	13 U [†]	482 mm (19 in)	584.2 mm (23 in)	Enclosure with glass door and M6 tapped mounting rails
AR100HD	13 U	482 mm (19 in)	584.2 mm (23 in)	Enclosure with vented door and M6 tapped mounting rails

[†]One U= 44.45 mm (1.75 in)

This fully reversible unit has the following:

- Storage height for 482 mm (19 in) rack-mount equipment
- Smoked, tempered glass front door (AR100) or fully vented front door (AR100HD)
- Solid rear door with keyholes for wall-mounting
- Locks on front and back doors
- Double hinge design provides front and rear access to installed equipment
- Adjustable front mounting rails with #12-24 tapped holes or square cage nut holes
- Fixed rear mounting rails with square cage nut holes
- Perforated side panel for side-to-side air flow.

Disclaimer

APC is not responsible for damage sustained during reshipment of this product.

Inventory

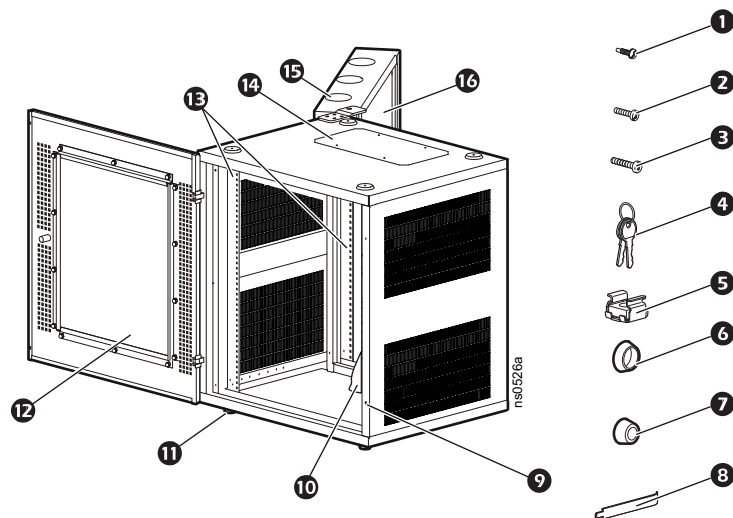
Verify the inventory

After unpacking the enclosure, verify that all required components and hardware have been shipped.



Note: If any items are missing, contact APC Customer Support at the APC Web site, www.apc.com.

Component Identification



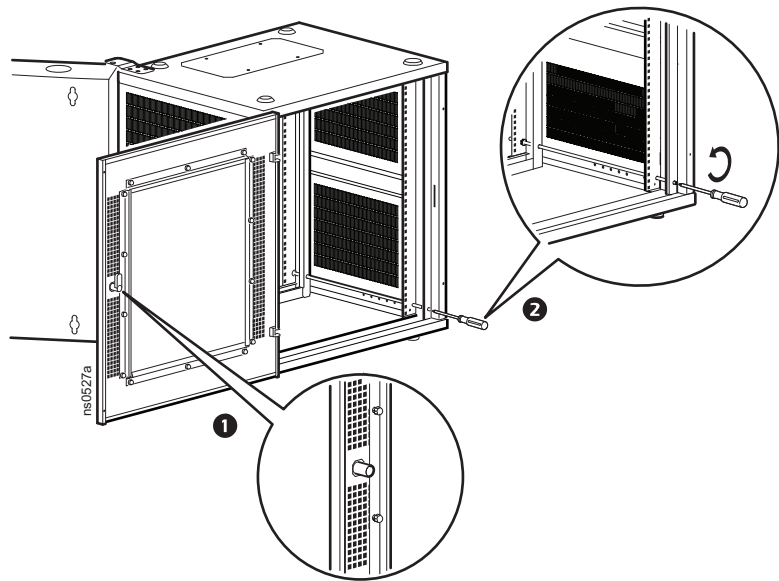
Item	Description	Qty	Item	Description
1	12x24x1/2 combo pan head screws	30	9	Rear door locking rods
2	M6x16 Phillips slot screws	30	10	Hardware bag (see below)
3	M4x16 pan head screws	4	11	Rubber feet
4	Keys	2	12	Front door
5	Cage nuts	30	13	Vertical mounting rails
6	Plastic cup washers	30	14	Removable access plate
7	Rubber feet	4	15	Cable access hole covers
8	Cage nut tool	1	16	Rear door

Configuration

Before installing your enclosure, plan the location and arrangement of components within the enclosure based on the available space.

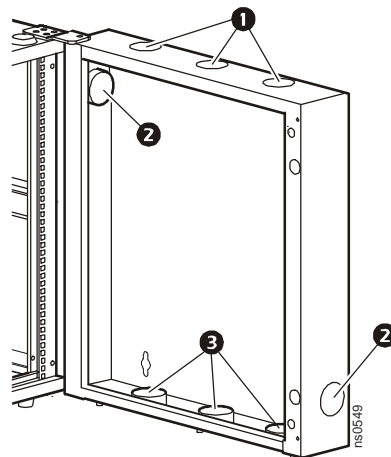
Door locks

The front and back doors of the unit have locks. The front door uses a key lock ❶, and the back door uses two locking rods ❷ that are accessible from the front of the unit. Use a small flathead screwdriver to unscrew each locking rod.

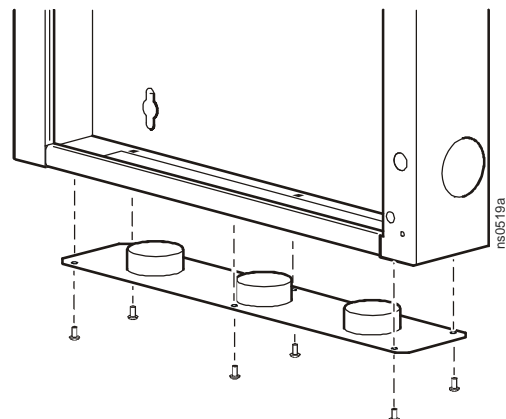


Cable access

The back door of the enclosure has eight openings for cable access: three in the top of the door ❶, one in either side of the door ❷, and three in the bottom of the door ❸. Each opening has an adjustable plastic cap for cable access.

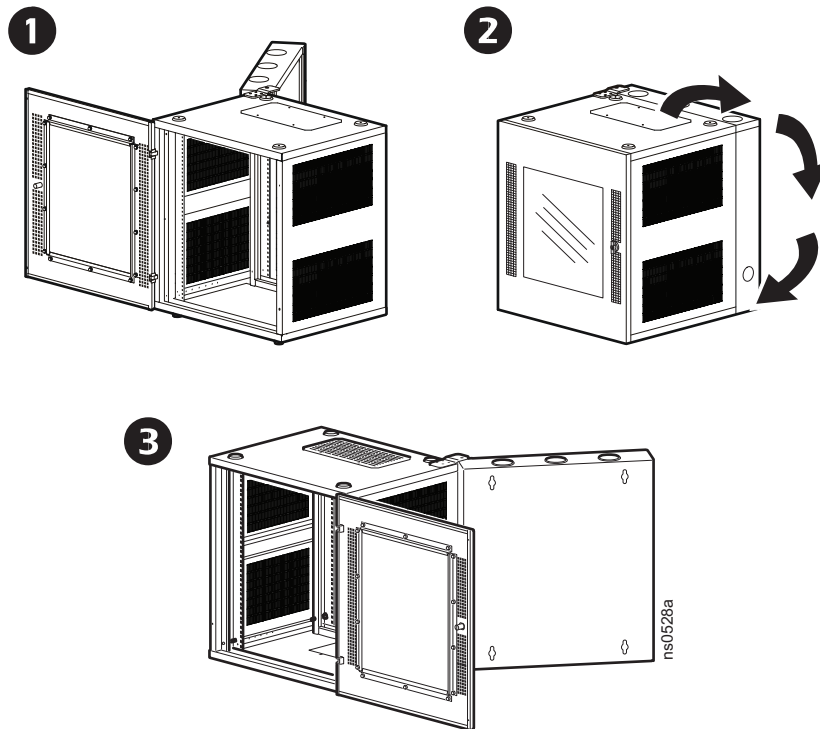


For unrestricted access to the back of the enclosure when the standard openings are insufficient, remove the six screws securing the access plate to the bottom of the rear door.



Reversing the enclosure

To reverse the enclosure to accommodate various configurations, turn it over so that the doors open in the opposite direction.

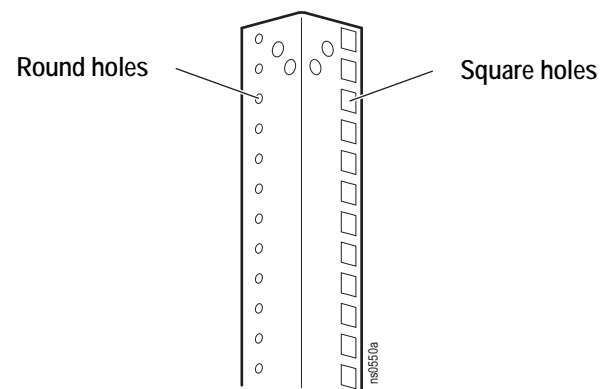


Mounting rails

This enclosure has square holes for using cage nuts and round #12-24 tapped holes for screws. You can reverse the front mounting rails to use either set of holes. You can also adjust the depth of the front rails to accommodate your equipment.



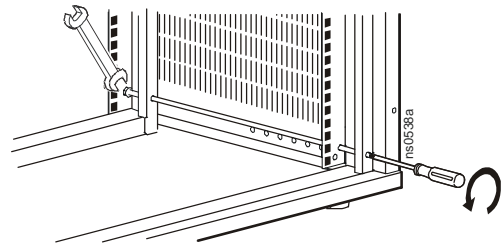
See “How to reverse the mounting rails” on page 6 and “Adjusting the depth of the front mounting rails” on page 7.



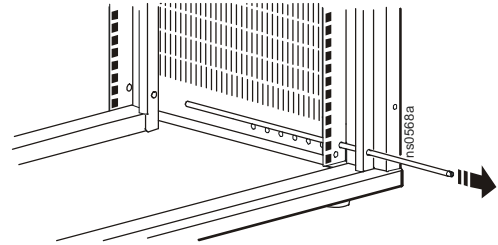
How to reverse the mounting rails

To reverse the front mounting rails, you must remove the locking rods, which are threaded through the upper and lower holes in the rail on the lock side of the enclosure, as shown.

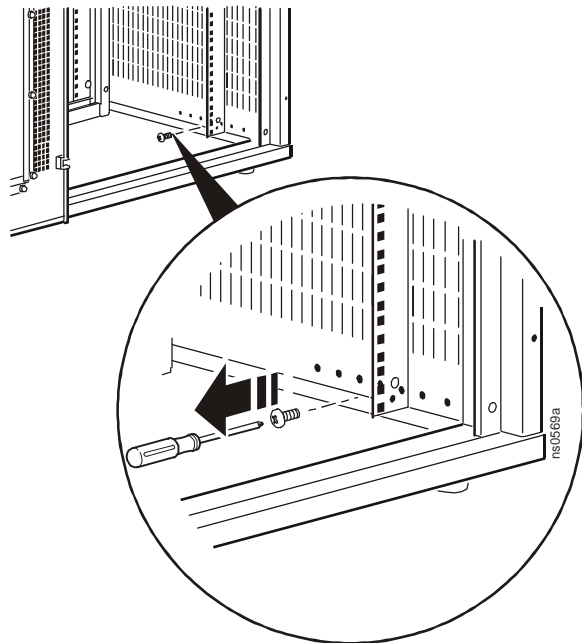
1. Each rod is held in place by a locking nut at the back of the enclosure. Use a 10-mm wrench to hold the nuts while you use a small flathead screwdriver to unscrew the locking rods.



2. Remove the rods from the enclosure.

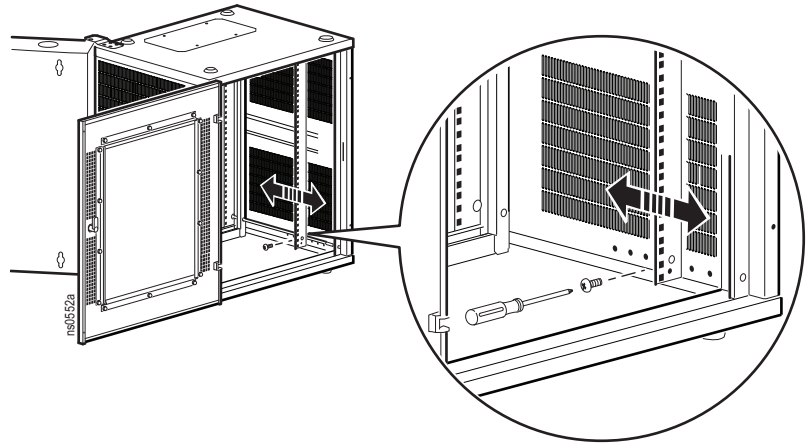


3. Use a Phillips screwdriver to remove the screws at the top and bottom of both rails.
4. Turn the rails over so that the upper and lower holes are facing the front of the enclosure.
5. Adjust the depth of the rails as required. See step 2 and step 3 of “Adjusting the depth of the front mounting rails” on page 7.
6. Re-insert the locking rod through the holes at the top and bottom of the rail. Use the nuts to keep the locking rods in place. Use a small flathead screwdriver to lock the rear door.



Adjusting the depth of the front mounting rails

1. Use a Phillips screwdriver to remove the screws in the front mounting rail.
2. Reposition the mounting rail to the front or back of the enclosure in one of the seven available positions.
3. Replace and tighten the screws in the highest and lowest holes.



Installation

Assembling the Enclosure

⚠ WARNING

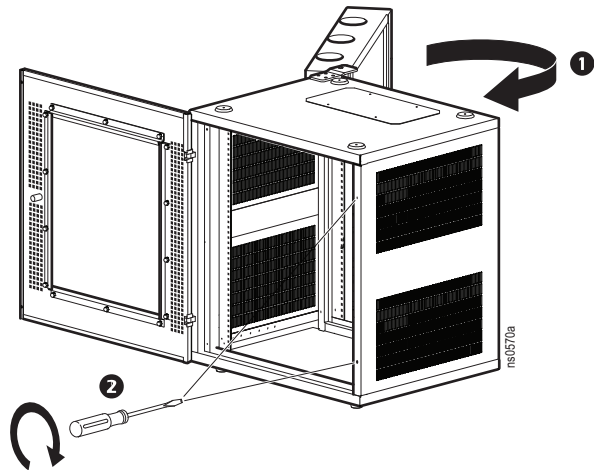
TIP HAZARD

To prevent the unit from tipping or becoming unstable, install the rubber feet or securely mount it to the wall before installing any components.

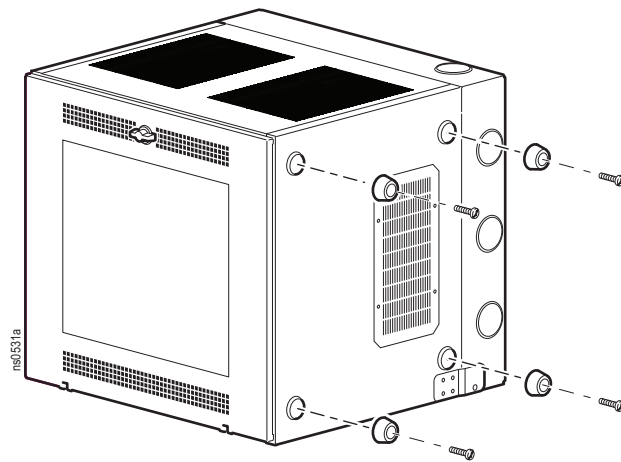
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Attaching the rubber feet

1. Move the enclosure to a level location.
2. Close the back door **1**.
3. Using a flathead screwdriver, turn the door-locking rods clockwise to lock the back door **2**.
4. Close the front door and secure it by turning the handle clockwise.



5. Lay the enclosure on its side.
6. Attach the rubber feet with the supplied screws.
7. Set the enclosure upright.

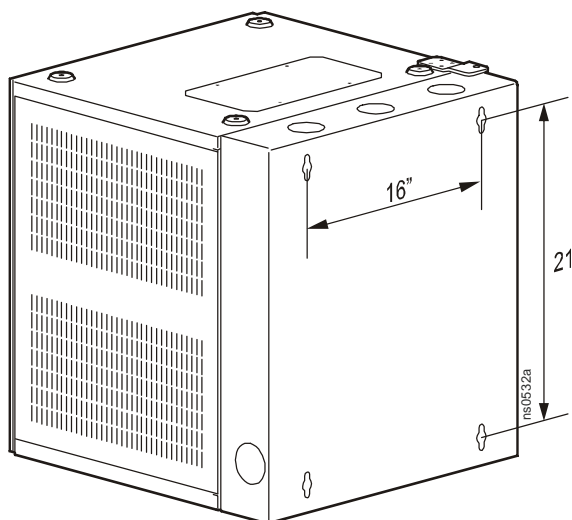


Mounting the Enclosure to a Wall

There are four keyhole cutouts on the back door that will accommodate up to a 0.953 mm (3/8 in) bolt. The holes are on standard 406.4 mm (16 in) centers horizontally, and 533 mm (21 in) centers vertically. Use the included template with a level to position the enclosure properly.



Use appropriate fasteners to secure the enclosure to the wall. For the weight of the enclosure and its maximum weight capacity, see “Specifications” on page 11.



Placing Equipment into the Enclosure



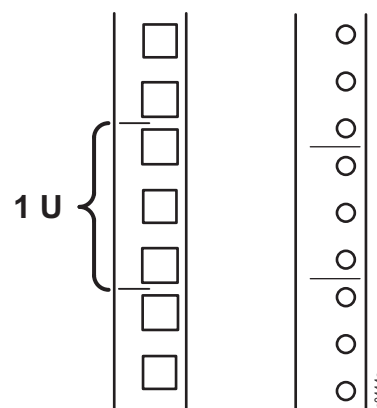
For specific information on how to mount rack equipment in the enclosure, see the installation instructions supplied with the equipment. No rail kits are utilized with the APC UPS products, so the UPS products should be mounted in the bottom of the enclosure. The UPS products will rest on the bottom cross-members of the NetShelter WX enclosure.



Note: APC Uninterruptible Power Supply (UPS) products should be mounted in the bottom of the enclosure.

Identifying one U-space

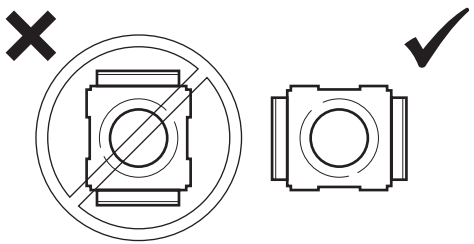
To install most equipment, you must locate the top and bottom of a U-space on the mounting rails. This enclosure has square holes for using cage nuts and round #12-24 tapped holes for screws. For the cage nuts and the tapped holes, the narrower space above and below each set of the three mounting holes indicates the top and bottom of a U-space.



Installing equipment

1. Review the equipment manufacturer's installation instructions.
2. Locate the top and bottom U-space on the mounting rails.
3. Install the cage nuts on the interior of the mounting rails, unless you are using the tapped holes. Then install the equipment. (To remove a cage nut, squeeze the sides to release it from the square hole.)

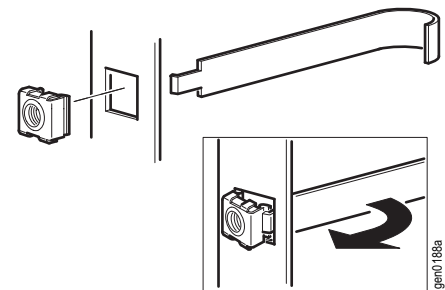
How to install and remove a caged nut

⚠ CAUTION	
FALLING EQUIPMENT	
To ensure equipment installs securely, install cage nuts with tabs engaging the left and right sides of the square hole. Do NOT install cage nuts with tabs engaging the top and bottom of the square hole.	
Failure to follow these instructions can result in injury or equipment damage.	

To install a cage nut:

1. From the inside of the enclosure insert the cage nut into the square hole by hooking a tab from one side of the cage nut onto one side of the opening.
2. Place the cage nut tool onto the tab on the opposite side of the cage nut and pull to snap it into position.

To remove a caged nut: Squeeze the tabs together to release.



Specifications

Item	Measurement
Height	662 mm (26.07 in)
Width	584 mm (23.00 in)
Depth	631 mm (24.86 in)
Maximum equipment depth	482.60 mm (19.00 in)
Net weight	42.73 kg (94.00 lb)
Equipment weight capacity	90.9 kg (200.00 lb)
Ventilation (front door)	143 870.70 mm ² (223.00 in ²)
Ventilation (side panel)	170 772 mm ² (264.6971 in ²) of perforated area X ~45.22% open = 77 222.37 mm ² (119.695 in ²)
Ventilation (glass front door)	15 483.84 mm ² (24.00 in ²)
Mounting space (without fan tray installed)	13 U or 577.85 mm (22.75 in)

Two-Year Factory Warranty

This warranty applies only to the products you purchase for your use in accordance with this manual.

Terms of warranty

APC warrants its products to be free from defects in materials and workmanship for a period of two years from the date of purchase. APC will repair or replace defective products covered by this warranty. 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. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory-remanufactured.

Non-transferable warranty

This warranty extends only to the original purchaser who must have properly registered the product. The product may be registered at the APC Web site, www.apc.com.

Exclusions

APC shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user's or any third person's misuse, negligence, improper installation or testing. Further, APC shall not be liable under the warranty for unauthorized attempts to repair or modify wrong or inadequate electrical voltage or connection, inappropriate on-site operation conditions, corrosive atmosphere, repair, installation, exposure to the elements, Acts of God, fire, theft, or installation contrary to APC recommendations or specifications or in any event if the APC serial number has been altered, defaced, or removed, or any other cause beyond the range of the intended use.

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Warranty claims

Customers with warranty claims issues may access the APC customer support network through the Support page of the APC Web site, **www.apc.com/support**. Select your country from the country selection pull-down menu at the top of the Web page. Select the Support tab to obtain contact information for customer support in your region.

APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Visit the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
 - **www.apc.com** (Corporate Headquarters)
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
 - **www.apc.com/support/**
Global support searching APC Knowledge Base and using e-support.
- Contact the APC Customer Support Center by telephone or e-mail.
 - Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

For information on how to obtain local customer support, contact the APC representative or other distributors from whom you purchased your APC product.

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