

FCC ID: JHQ-AP 9615

Smart Slot™

**5 Port
10Base-T Hub**

AP9615

APC®

FCC ID: JHQ-AP9615

Thank You!

Thank you for selecting the APC SmartSlot 5 Port 10Base-T Hub (AP9615). It has been designed for many years of reliable, maintenance-free service in combination with your American Power Conversion (APC) uninterruptible power supply (UPS). APC is dedicated to the development of high-performance electrical power conversion and control products. We hope that you will find this product a valuable, convenient addition to your computing system.

Please read this manual! It provides important safety, installation, and operating instructions that will help you get the most from your SmartSlot hub.

Save this manual! It includes instructions for obtaining warranty service.

Radio frequency interference

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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, 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 or TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Introduction

Overview

The SmartSlot™ 5-Port 10Base-T Hub is an APC accessory that allows you to expand or create a local area network (LAN) by installing it in the SmartSlot of an APC UPS or expansion chassis.

Features of the 5 Port 10Base-T Hub

The following list shows some of the features of the 5 Port 10Base-T Hub. Your hub...

- Installs easily into any SmartSlot-equipped APC UPS or expansion chassis, thus minimizing clutter.
 - Has 4 station ports and 1 uplink port.
 - Can be used to create a stand-alone, 5-station, 10Base-T network or can expand an existing 10Base-T network by 4 stations.
 - Is powered by the host APC UPS or accessory.
 - Has LEDs that show information on the hub's power status and the presence of data collisions.
 - Has LEDs on each port that indicate the presence of traffic, link, and partitioning.
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Hardware requirements

The 5 Port 10Base-T Hub requires:

- An APC UPS or expansion chassis with an available SmartSlot.
 - A configured 10Base-T port for each device to be attached.
 - An unshielded twisted pair (UTP) communication cable for each device to be attached. (See "Communication cables" on page 4 for more information.)
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Product Description

Front panel

This figure shows the front panel of the 5 Port 10Base-T Hub. The features of the front panel are described in the paragraphs that follow.

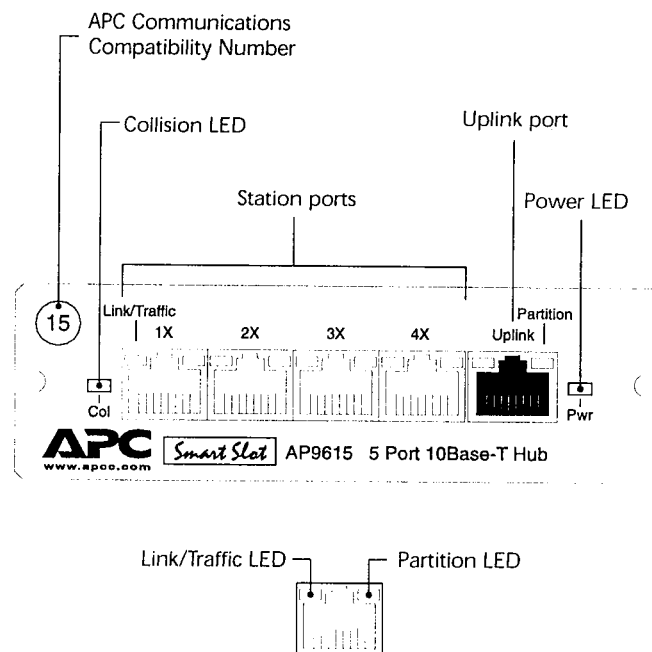


Figure 1: Front Panel and Connector Detail

APC Communications Compatibility Number

The APC Communications Compatibility Number (CCN), which appears on the upper left corner of the front panel, refers to the ability of an accessory to work with other APC products. (The CCN for your hub may be different from the example shown in Figure 1.) In general, we strive to make all APC products compatible with one another; however, if you want specific information on the compatibility of the 5 Port 10Base-T Hub with APC UPSs and accessories, visit the APC support page (<http://www.apcc.com/support/#kbase>) and search for Communications Compatibility Number.

Continued on next page

Product Description *continued*

Station ports

The Station ports are the first 4 RJ-45 ports, which are labeled 1X–4X. The Station ports use straight-through UTP cables to connect the hub with:

- Workstations or other non-hub devices that you want to include in your network.
- The Uplink port of another hub in a cascading configuration.

Note: A Station port acts as an Uplink port when it is used with a crossover cable.

Uplink port

The Uplink port is normally used in either of the following ways, as shown in Figure 2.

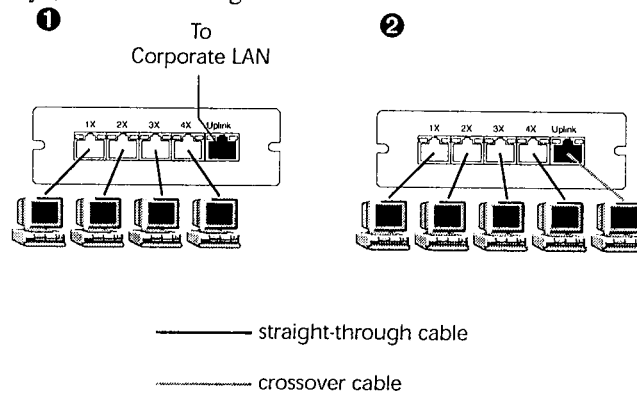


Figure 2: Dual Use of the Uplink Port

- 1 Connected in cascade with a Station port of another hub or switching device, using a straight-through cable.
 - 2 Connected to a workstation or other non-hub device, using a crossover cable.
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Communication cables

The hub requires a category 3, 4, or 5 UTP 10Base-T communication cable for each device to be attached.

Installing the Hub *continued*

Installation procedure, continued

- 3 Use a #2 Phillips head screwdriver to remove the 2 screws fastening the SmartSlot cover plate to the back panel of the UPS or triple chassis. Keep the screws for Step 5 below. Save the SmartSlot cover plate for future use (e.g. shipping the UPS).
- 4 Orient the hub to fit into the SmartSlot. Slide the hub all the way into the slot until its front panel is flush with the back panel of the UPS or triple chassis. Observe the correct orientation as shown in Figure 3. Note that the sides of the circuit board align with the card guides of the SmartSlot.

***Note:** While it is not possible to install the hub upside down, it is possible to damage the unit in the attempt to do so.*

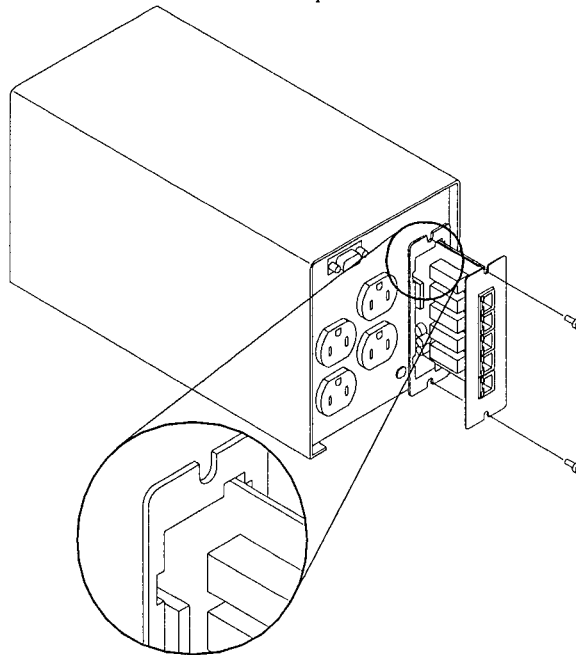


Figure 3: Orient the hub to fit into the SmartSlot.

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Installing the Hub *continued*

Maximum configuration

Using a star configuration, you can cascade up to ten 5 Port 10Base-T hubs together to provide network connections for as many as 32 stations, as shown below in Figure 4. Note the use of a crossover cable to connect the Uplink ports of the 2 central hubs.

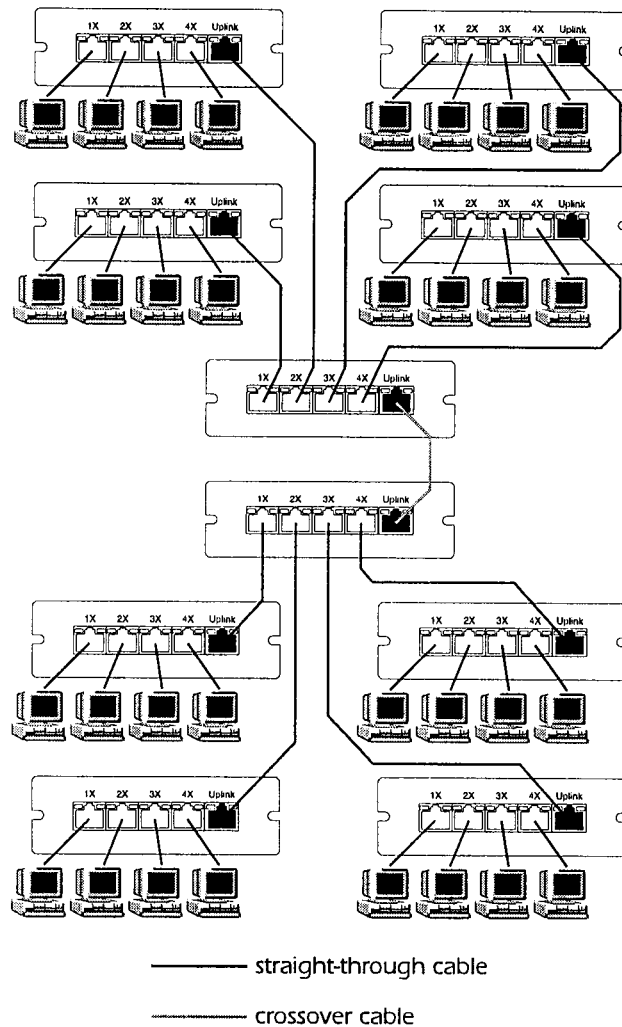


Figure 4: Cascading Hubs in a Star Configuration

Specifications

Product specifications

The following table shows the product specifications for the 5 Port 10Base-T Hub.

Item	Specification
Power	
Input voltage range:	18–30 VDC
Maximum current draw:	45 mA
Physical	
Size (H × W × D):	1.46 × 4.75 × 4.30 in (3.7 × 12.1 × 10.9 cm)
Weight:	0.25 lb (0.11 kg)
Shipping weight:	0.65 lb (0.30 kg)
Environmental	
Elevation (above MSL): Operating Storage	0 to 10,000 ft (0 to 3000 m) 0 to 50,000 ft (0 to 15 000 m)
Temperature: Operating Storage	32 to 122°F (0 to 50°C) 5 to 158°F (-15 to 70°C)
Relative humidity: Operating Storage	0 to 95%, non-condensing 0 to 95%, non-condensing
Approvals/Standards	
FCC, Part 15, Class B EN 55 022 (CISPR 22), Class B VCCI Class 2 IEC 1000-4-2, 3, 4 CE C-Tick IEEE 802.3 10Base-T Port Configuration: Station Ports are MDI-X, Uplink port is MDI	

Table 3: Product Specifications