

CONVERTEON™ Family AT-PWR15 Redundant Power Supply (DC) Installation Guide

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Overview

The AT-PWR15, shown in Figure 1, is an DC redundant power supply (RPS) used with the AT-CV5000 DC chassis only. When installed, the module operates in a standby mode. If the standard power supply fails or loses power, the AT-PWR15 module changes from standby to active and provides all power to the system to prevent a network failure.

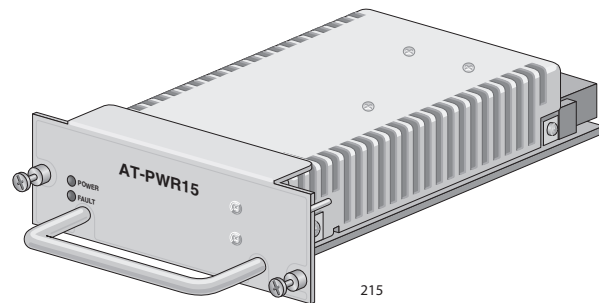


Figure 1. AT-PWR15 Power Supply Module

Note

The power supply is hot-swappable. You can install it without powering OFF the AT-CV5000 chassis.



Warning

This unit may have more than one input. To reduce the risk of electric shock, disconnect all power inputs prior to servicing the unit.

Related Documents

This installation guide is an abbreviated version of the installation procedure. For details on the components, features, and functions of this product, refer to the following documents on our web site, www.alliedtelesyn.com:

- ❑ AT-CV5000 Media Converter Chassis Installation Guide (PN 613-50580-00)
- ❑ AT-S70 Management Software User's Guide (PN 613-50617-00)

Package Contents

Make sure the following items are included in the shipping package. If any item is missing or damaged, contact your Allied Telesyn sales representative for assistance.

- ❑ One AT-PWR15 Redundant Power Supply (DC)
- ❑ This Installation Guide
- ❑ Warranty Card

Locations of the Power Supply Slots

Figure 2 illustrates the locations of the two power supply modules at the rear of an AT-CV5000 DC model chassis.

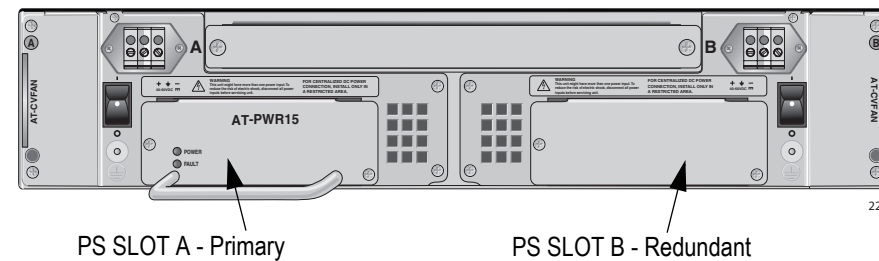


Figure 2. Locations of the Power Supply Slots on the Rear Panel of an AT-CV5000 DC Model Chassis

Before installing a power supply, please note the following guidelines:

Note

The AT-CV5000 chassis comes with two slots designated for the power supplies; however, it is shipped with one standard power supply preinstalled and one empty slot for an optional power supply. The redundant power supply can be ordered separately from your ATI sales representative.



Warning

Make sure that both power supplies (primary and redundant) are rated for the same power ratings; otherwise, the power supplies may get damaged.

Note

For centralized DC power connection, install only in a restricted access location.

Installing the AT-PWR15 Power Supply

To install the AT-PWR15, perform the following procedure:

1. Unpack the new AT-PWR15 module from its shipping container and store the package material in a safe location.

Note

You must use the original shipping material if you need to return the power supply module to Allied Telesyn.

2. Select the power supply slot in the AT-CV5000 chassis where you want to install the AT-PWR15 power supply.
3. Loosen the two captive screws that secure the blank slot cover (AT-CV5PNL2) of the selected power supply slot, and remove the blank slot cover, as shown in Figure 3.

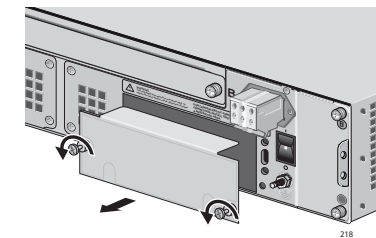


Figure 3. Removing the Power Supply Slot Cover

4. Slide the AT-PWR15 module into the RPS slot, as shown in Figure 4.

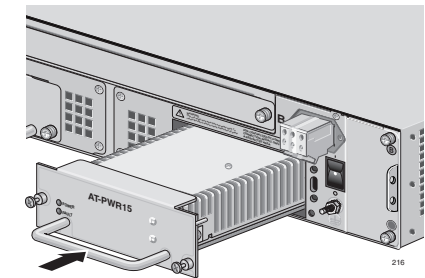


Figure 4. Inserting the AT-PWR15 Module into the Power Supply Slot

5. Secure the AT-PWR15 module to the AT-CV5000 chassis by using a Phillips screwdriver to tighten the captive screws, as shown in Figure 5.

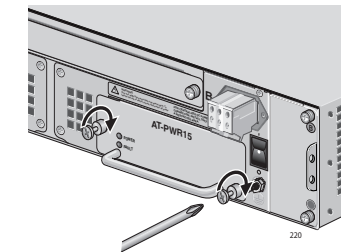


Figure 5. Securing the AT-PWR15 Module

Powering On a DC Powered Chassis

This section describes how to power on a DC powered AT-CV5000 chassis.

Warning

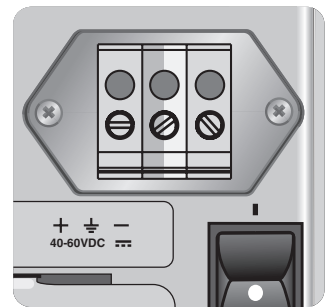
As a safety precaution, a 15 Amp circuit breaker should be installed at the supply end of the cable to be used with this LAN equipment.

ALWAYS connect the wiring to the LAN equipment first before connecting the wiring to the breaker. To avoid the danger of physical injury from electrical shock, do not work with HOT feeds. Always be sure that the breaker is in the OFF position before connecting the wiring to the breaker.

Note

A tray cable is required to connect the power source if the chassis is powered by centralized DC power. The tray cable must be an UL listed Type TC tray cable and rated at 600 V and 90 degree C, with three conductors, minimum 14 AWG.

1. Make sure that the ON/OFF power switch is in the OFF position.
2. Locate the two DC terminal blocks, labeled A and B, on the rear panel of the chassis.
3. Starting from the left side of a terminal block, identify the **positive, power supply ground** and **negative** terminals using the symbols below the terminal block in Figure 6.



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Figure 6. DC Terminal Block

4. With a 14-gauge wire-stripping tool, strip the three wires in the tray cable coming from the DC input power source to $8\text{mm} \pm 1\text{mm}$ (0.31 in., ± 0.039 in.), as shown in Figure 7.

Warning

Do not strip more than the recommended amount of wire. Stripping more than the recommended amount can create a safety hazard by leaving exposed wire on the terminal block after installation.

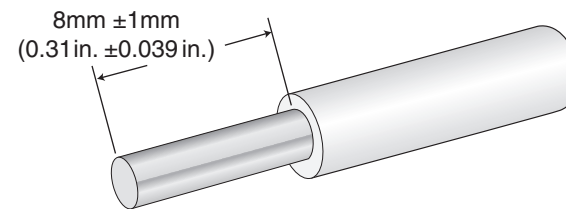


Figure 7. Stripped Wire

5. Connect the power supply ground wire into the middle of the three terminals; this is the terminal marked with the ground symbol. Inserting the wire into the terminal and tightening the connection with a flathead screwdriver, as shown in Figure 8.

Warning

When installing this equipment, always ensure that the power supply ground connection is installed first and disconnected last.

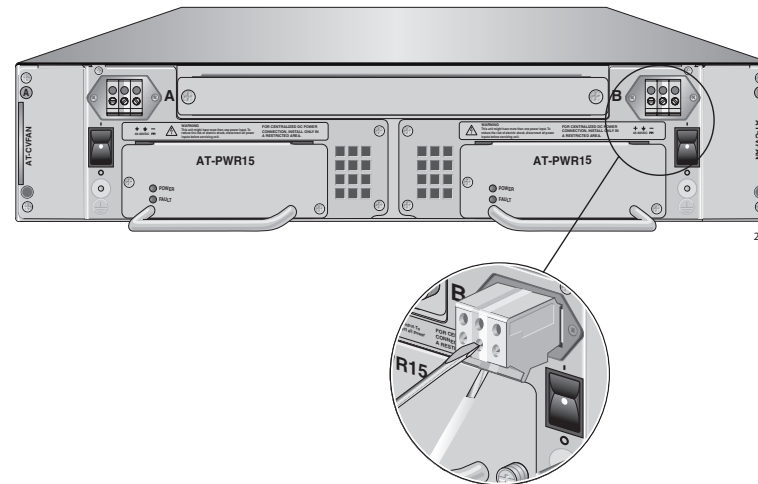


Figure 8. Inserting Wires into a DC Terminal Block

6. Connect the +48 VDC (RTN) feed wire to the terminal block marked + (plus).
7. Connect the -48 VDC feed wire to the terminal block marked - (minus).

Technical Specifications

Physical and Environmental

Dimensions (H x W x L)	3.67 cm x 10.1 cm x 17.1 cm (1.45 in x 3.97 in x 6.73 in)
Weight	1.75 lbs
Operating Temperature	0° C to 40° C (32° F to 104° F)
Storage Temperature	-25° C to 70° C (-13° F to 158° F)
Operating Relative Humidity	5% to 90% RH (non-condensing)
Storage Relative Humidity	5% to 95% RH (non-condensing)
Operating Altitude Range	Up to 3,000 m (9,843 ft)

Electrical Ratings

DC Input Current:	40 to 60 VDC (6.0 A)
Nominal Input Frequency:	47-63 Hz

Electrical Safety and Emission Statement

Standards: This product meets the following standards when installed in compliant host equipment.

U.S. Federal Communications Commission

RADIATED ENERGY

Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of 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 this 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.


Note: Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Industry Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Emission FCC Class A, EN55022 Class A, VCCI Class A, C-TICK, CE

WARNING:  In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Immunity EN55024

Electrical Safety UL60950-1 (cUL-us), EN60950 (TUV), CAN/CSA C22.2 No. 60950-1-03