



Installation Guide for Multi-Station Power Supply



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PLEASE READ THESE LEGAL NOTICES CAREFULLY.

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Additional Information

Net Optics, Inc. reserves the right to make changes in specifications and other information contained in this document without prior notice. Every effort has been made to ensure that the information in this document is accurate.

Introduction

Get rid of the brick pile with Net Optics Multi-Station Power Supply. This dual AC input Power Supply provides multiple DC power leads in a rack-mountable 1U chassis. The Power Supply supports single or redundant power connections compatible with Net Optics' rack-mountable Taps, Port Aggregator Taps, and Dual Port Aggregator Taps.

Compatible with 100-230 VAC input, the Multi-Station Power Supply delivers 350 Watts of power to Net Optics 12 VDC devices worldwide. A model that takes -48VDC input is also available.

Key Features

Technology Features

- Streamlined design provides power for multiple Net Optics Taps with redundancy in a 1U high form factor.
- Powers single or redundant power connections, eliminating clutter from multiple separate power supplies
- Two multiple lead connection sets support easy pairing for power redundancy
- Universal power enables worldwide deployment
- Fully RoHS compliant

Ease of Use

- LED indicators show redundant power status
- Accepts 110 and 220 VAC input
- Strain-relief cable control
- Incorporates 19" rack mount frame for easy installation
- Two meter DC power leads for easy connection
- Compatible with all Net Optics 12 VDC devices

Support

- Net Optics offers free technical support throughout the lifetime of your purchase. Our technical support team is available from 8 am to 5 pm Pacific Time, Monday through Friday at +1 (408) 737-7777 and via email at ts-support@netoptics.com. FAQs are also available on Net Optics website at www.netoptics.com.

General Description

The AC version of the product accepts power from two AC line sources. The unit can operate from either one or both AC power sources. The power inputs are “universal,” accepting 85-264 VAC, 47-63 Hz.

The DC version of the product accepts power from two DC sources. The unit can operate from either one or both DC power sources. The input voltages can be from -32 to -72VDC and is compatible with most telecommunications equipment rooms.

For both AC and DC models, the unit delivers a nominal 12VDC output on 24 leads terminated with barrel connectors. It is designed to be used with the following Net Optics products (Taps):

- TP-CU 10/100BaseT Tap
- TP-CU3 10/100/1000BaseT Tap
- PA-CU 10/100BaseT Port Aggregator Tap
- PA-CU-AR 10/100BaseT Port Aggregator Tap, AR
- PAD-CU 10/100BaseT Dual Port Aggregator Tap
- PAD4-CU-AR 10/100BaseT Dual Port Aggregator Tap, AR
- CVT-CU/SX GigaBit TX to SX Tap
- CVT-TX/LX GigaBit TX to LX Tap
- CVT-SX/TX GigaBit SX to TX Tap
- CVT-LX/TX GigaBit LX to TX Tap
- PAD-SX4 GigaBit SX Dual Port Aggregator Tap, 60:40
- PAD-SX5 GigaBit SX Dual Port Aggregator Tap, 50:50
- PAD-GCU GigaBit Copper Dual Port Aggregator Tap

What is In the Box

Carefully unpack the Multi-Station Power Supply and other accessories. The product is delivered with the following:

- (1) Multi-Station Power Supply
- (2) Power cords (AC model only)
- (2) Power supply clips (AC model only)
- (1) Installation Guide for Multi-Station Power Supply (this manual)
- Extended Warranty if purchased

Check the packing slip against parts received. If any component is missing or damaged, contact Net Optics Customer Service immediately at +1 (408) 737-7777.

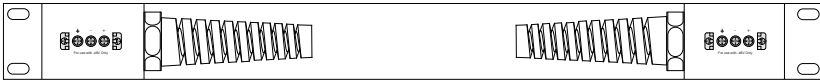
Product Diagrams



Figure 1: Front View Panel



AC Model



DC Model

Figure 2: Rear View Panel

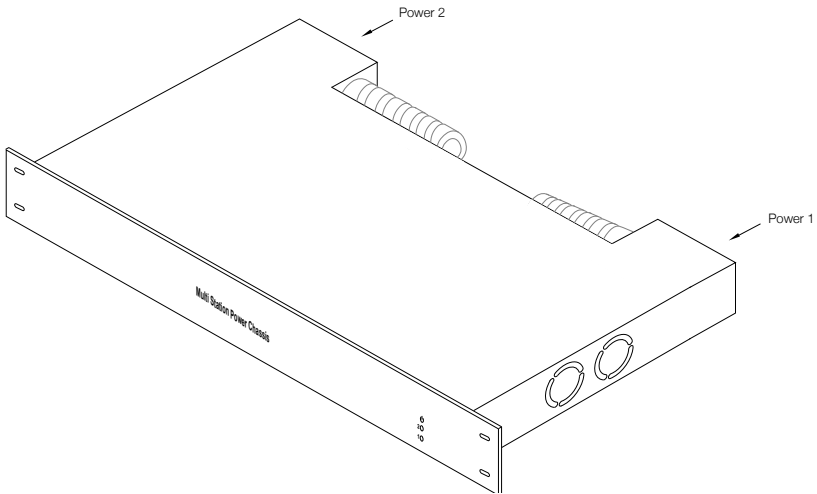


Figure 3: Multi-Station Power Supply

Product Diagrams

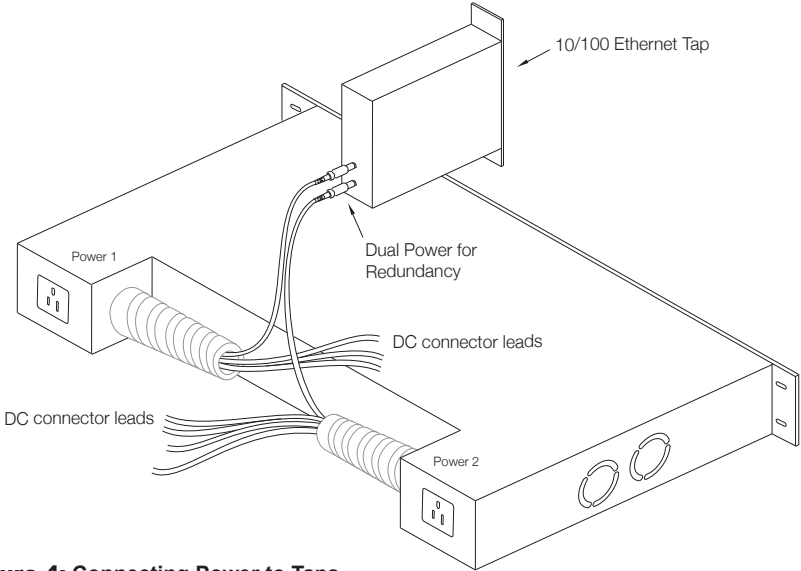


Figure 4: Connecting Power to Taps

Installation

To install the Multi-Station Power Supply, you simply need to connect the input power and plug the DC output connector leads into supported Net Optics devices. Details of these procedures are given in the following sections. You can make the connections in any order: The input power can be connected either before of after the outputs. Connections can be made and removed while the unit is under power.

To disconnect the unit, simply unplug or disconnect the power cords from the chassis, and the DC output connector leads from the Net Optics devices. The inputs and outputs can be disconnected in any order; however, for the DC model, the earth grounds should be left in place as long as any other connections are present.

Connecting the Multi-Station Power Supply to Net Optics Taps

1. Unpack the Multi-Station Power Supply, and verify that you have all the necessary components to successfully install the Taps.
2. Connect one of the DC connector leads from Power 1 into the DC jack 1 on the first Tap. If present, remove the rubber cap from the barrel connector before plugging it into the Tap.
3. Connect one of the DC connector leads from Power 2 into the DC jack 2 on the first Tap. If present, remove the rubber cap from the barrel connector before plugging it into the Tap.

Note:

Each Tap should have a DC connector lead from both Power 1 and Power 2 in order to have power redundancy.

4. Repeat Steps 2 and 3 above for connecting additional Taps to the Power Module.

Connecting AC Input Power to the Multi-Station Power Supply (AC model)

1. If you have not already done so, unpack the Multi-Station Power Supply and verify that you have two appropriate AC power cords.
2. Connect one of the AC power cords to one of the AC power connector on the rear of the Multi-Station Power Supply.
3. Install a power supply clip over to keep the AC power cord from accidentally being unplugged from the AC power connector.
4. Plug the other end of the cord into an AC power source.
5. Repeat steps 2-4 for the other AC power cord, connecting it to the remaining AC power connector on the rear of the Multi-Station Power Supply.

Note:

Each AC power source should be independent of the other in order to have power redundancy. If you do not require power redundancy, the unit can be operated with a single power cord connected to a single AC power source. In this case, either AC power connector on the rear of the Multi-Station Power Supply may be used for the connection.

Note:

Use the AC power cords supplied with the product. If you use another AC power cord, it should have a wire gauge of at least 16 and a 230VAC 7A rating.

Connecting DC Input Power to the Multi-Station Power Supply (DC model)

1. If you have not already done so, unpack the Multi-Station Power Supply and verify that you have two appropriate DC power cables. You also need a Phillips screwdriver to complete the installation.
2. Connect an earth ground lead to the terminal labeled with the ground symbol (\oplus) on both DC power terminal blocks on the rear of the chassis. Use the screwdriver to tighten the connections.
3. Connect one of the DC power cables to one of the DC power terminal blocks on the rear of the Multi-Station Power Supply. If present, remove the protective cover from the DC power terminal block. Connect the negative (-48VDC) side of the cable to the terminal labeled with the minus symbol ($-$) and the positive (0V) side of the cable to the terminal labeled with the plus symbol ($+$). Use the screwdriver to tighten the connections.
4. Repeat step 2 for the other DC power cable, connecting it to the remaining DC power terminal block on the rear of the Multi-Station Power Supply.
5. Carefully connect the other ends of the DC power cables to two -48VDC power sources. If possible, turn off the power to power source while you are making these connections. Be sure to connect the positive sides of the cables to the positive sides of the power sources, and the negative sides of the power cables to the negative sides of the power sources.

Note:

Each DC power source should be independent of the other in order to have power redundancy. If you do not require power redundancy, the unit can be operated with a single power cable connected to a single DC power source. In this case, either DC power block on the rear of the Multi-Station Power Supply may be used for the connection.

Note:

DC power cables should have a wire gauge of at least 14 and a 72VAC 13A rating.

Installation in a Restricted Access Location in Finland and Norway

Installation in a Restricted Access Location is required in Finland and Norway for the Multi-Segment Power Supply. Because of concerns about unreliable earthing in Finland and Norway, this equipment must be installed in a Restricted Access Location (RAL) in these countries. An RAL is defined as an access that can be gained only by trained service personnel who have been instructed about the reasons for the restricted access and any safety precautions that must be taken. In these cases, the use of a tool (such as lock and key) or other means of security is required for access to this equipment.

Warnings and Symbols**Warnings on product**

WARNING: Warranty void if removed

Two of these labels cover screws on the chassis top cover near the front corners. They prevent you from taking the cover off without voiding your warranty. You should not take the cover off because there are no user-serviceable parts inside, and there is a danger of electrical shock.

Symbols on product



Indicates WEEE compliance



Indicates CE compliance



Indicates RoHS compliance



Indicates C-Tick compliance



Indicates VCCI compliance



Indicates MET compliance
(U.S.A. safety)

Specifications

Environment

Operating Temperature: 0°C to 40°C

Storage Temperature: -20°C to 85°C

Relative Humidity: 10% min, 95% max, non-condensing

Mechanical

Dimensions: 1.75" high x 12.5" deep x 17" wide

Power

AC input: 85-264 VAC, 47-63 Hz, 5 A max @ 115 VAC,

2.50A max @ 230 VAC

DC input: -48VDC nominal, -36 to -72VDC, 12.2 A max @ 36 VDC,

5.8 A max @ 72 VDC

DC output: 12V, 3.6A per lead (AC model), 2.4A per lead (DC model)

Output Power: 350 Watts

Connectors

(2) AC power receptacles or (2) DC power blocks (depending on model)

(16 or 24) DC connector leads, 2.5mm ID, barrel-type

Certifications

Fully RoHS compliant

Part number

Power 12-350 Multi-Station Power Supply, 350W

Power 12-350-DC Multi-Station Power Supply, 350W, -48VDC

Limitations on Warranty and Liability

Net Optics offers a limited warranty for all its products. IN NO EVENT SHALL NET OPTICS, INC. BE LIABLE FOR ANY DAMAGES INCURRED BY THE USE OF THE PRODUCTS (INCLUDING BOTH HARDWARE AND SOFTWARE) DESCRIBED IN THIS MANUAL, OR BY ANY DEFECT OR INACCURACY IN THIS MANUAL ITSELF. THIS INCLUDES BUT IS NOT LIMITED TO LOST PROFITS, LOST SAVINGS, AND ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR INABILITY TO USE THIS PRODUCT, even if Net Optics has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Net Optics, Inc. warrants this 12 Lead Power Supply to be in good working order for a period of ONE YEAR from the date of purchase from Net Optics or an authorized Net Optics reseller.

Should the unit fail anytime during the said ONE YEAR period, Net Optics will, at its discretion, repair or replace the product. This warranty is limited to defects in workmanship and materials and does not cover damage from accident, disaster, misuse, abuse or unauthorized modifications.

If you have a problem and require service, please call the number listed at the end of this section and speak with our technical service personnel. They may provide you with an RMA number, which must accompany any returned product. Return the product in its original shipping container (or equivalent) insured and with proof of purchase.

Additional Information

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Net Optics is always open to any comments or suggestions you may have about its products and/or this manual.

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