Connecting the Cisco External Power Supply to the Cisco Ethernet Switch Network Modules

This chapter describes the equipment required to connect the Cisco external power supply to the Cisco Ethernet switch network modules installed in Cisco 2600 series, Cisco 3600 series, and Cisco 3700 series routers. The Cisco external power supply includes four DC output power modules for inline power for IP telephony.

This chapter contains the following sections:

- "Tools and Equipment Required" section on page 5-1
- "Cabling Options" section on page 5-2
- "Connecting the Cisco External Power Supply to the Network Module" section on page 5-3

Tools and Equipment Required

You might need to order the following equipment:

- One-to-one D-shell 15-pin to Micro-D 15-pin cable—Needed for powering a single network module with a single power supply.

- One-to two Micro-D 15-pin to D-shell15-pin Y cable—Needed for powering two network modules with a single power supply

- Two-to-one D-shell 15-pin to Micro-D 15-pin Y cable—Can be used for redundant support

Cabling Options

The external power supply can supply power to the Cisco Ethernet switch network module in three ways:

- One-to-one connection using one-to-one (D-shell to Micro-D) cables

- One-to-two connection using one-to two (one D-shell to two Micro-D) Y cables for powering two network modules with a single power supply

- Two to one connection using two-to-one (two D-shell to one Micro-D) Y cables for redundant support

These connection types are described in the "Power Configurations" section on page 1-2.

Figure 5-1, Figure 5-2, and Figure 5-3 show the cables you can order. For ordering information, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com. See also the "Obtaining Technical Assistance" section on page xvi.
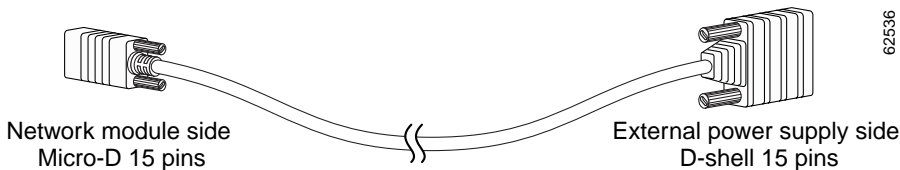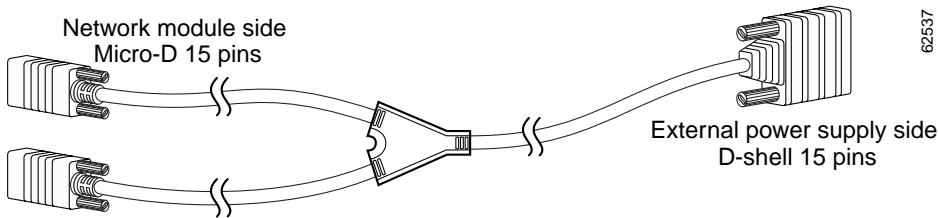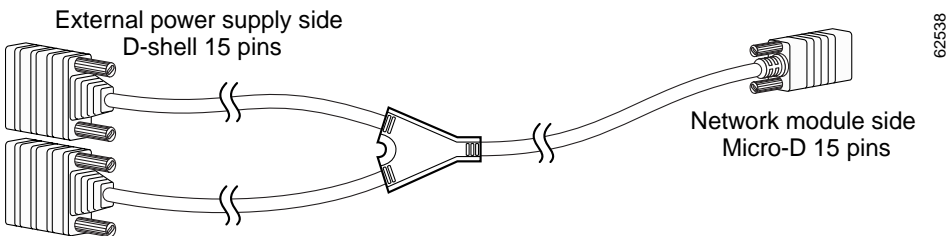
Figure 5-1   One-to-One Cable

Network module side
Micro-D 15 pins

External power supply side
D-shell 15 pins

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Figure 5-2   One-to-Two Y-Shaped Cable

Network module side
Micro-D 15 pins

External power supply side
D-shell 15 pins

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Figure 5-3   Two-to-One Y-Shaped Cable

External power supply side
D-shell 15 pins

Network module side
Micro-D 15 pins

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Connecting the Cisco External Power Supply to the Network Module

This section explains how to connect the Cisco external power supply to the Cisco Ethernet switch network module. The power module is connected to a Cisco external power supply using a power connection cable. Your procedure will depend on the type of connection you are performing, as follows:

Connecting a One-to-One Configuration

Perform the following steps to connect the Cisco external power supply to the Cisco Ethernet switch network module:
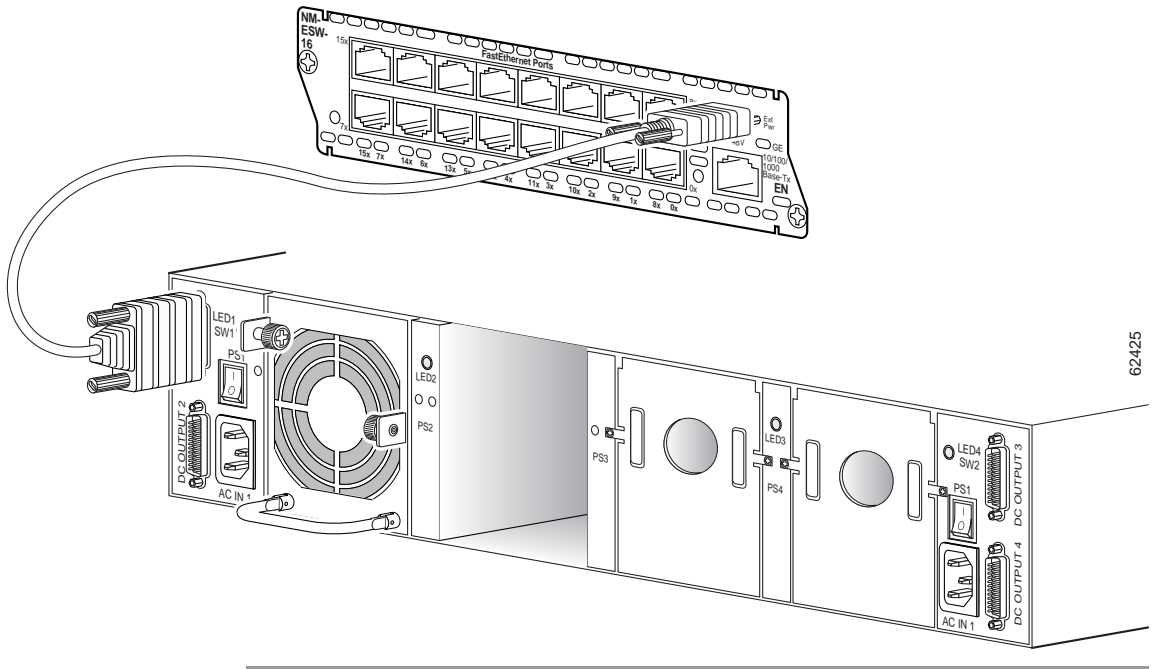
Step 1   Connect the Micro-D side of the cable to the power supply connector on the Cisco Ethernet switch network module. See Figure 5-4.

Step 2   Connect the D-shell side of the cable to the appropriate output connector on the rear panel of the Cisco external power supply.

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Caution   The mounting screws on the power supply cables should be tightened securely.

Step 3   Ensure that the LEDs are green and the power supply is working properly. See the "LEDs" section on page 1-6 for LED descriptions.

Figure 5-4   Connecting the Cisco External Power Supply to the Cisco Ethernet Switch Network Module

Connecting a One-to-Two Configuration

Perform the following steps to connect the Cisco external power supply to two Cisco Ethernet switch network modules:

Step 1   Connect one Micro-D side of the cable to the power supply connector on the Cisco Ethernet switch network module. See Figure 5-5.

Step 2   Connect the other Micro-D side of the cable to the power supply connector on the second Cisco Ethernet switch network module.

Step 3   Connect the D-shell side of the cable to the appropriate output connector on the rear panel of the Cisco external power supply.
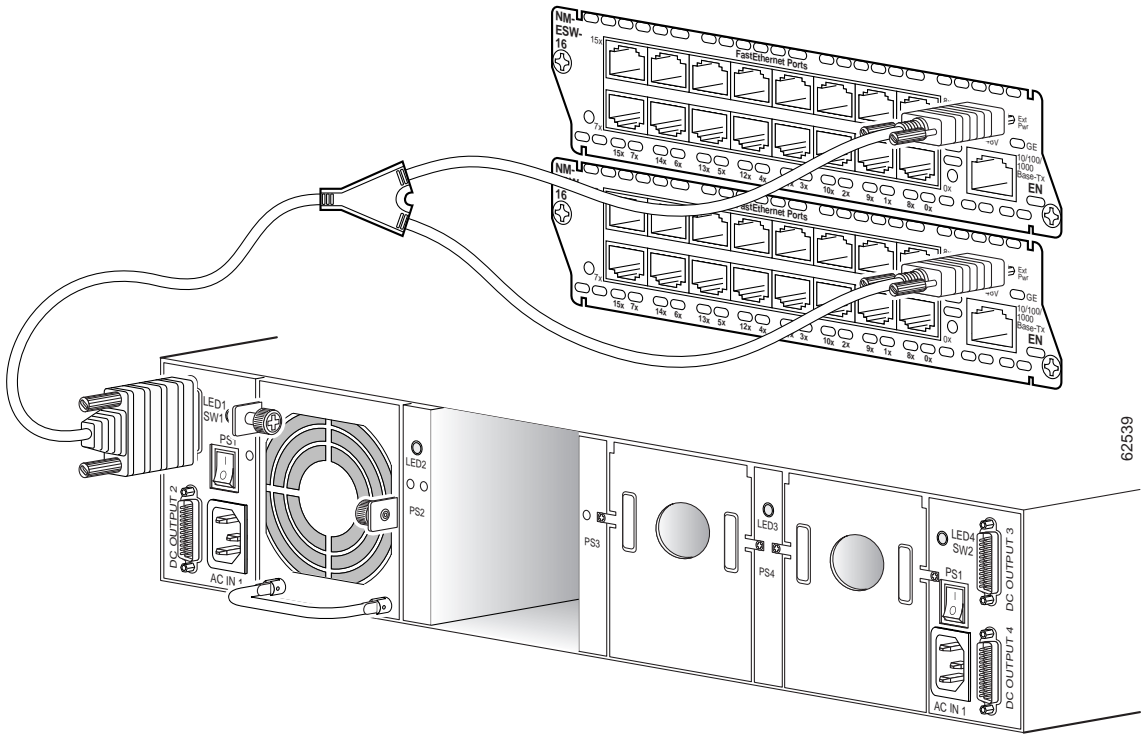
⚠️

Caution   The mounting screws on the power supply cables should be tightened securely.

✎

Note   All ends of the cable must be connected and both network modules must
be installed for the power supply to turn on.

Step 4   Ensure that the LEDs are green and the power supply is working properly. See the
"LEDs" section on page 1-6 for LED descriptions.

Figure 5-5   *Connecting the Cisco External Power Supply to Two Cisco Ethernet Switch Network
Modules*

Connecting a Redundant Two-to-One Configuration

Perform the following steps to connect the Cisco external power supply to the Cisco Ethernet switch network module:

Step 1 Connect the Micro-D side of the cable to the power supply connector on the Cisco Ethernet switch network module. See Figure 5-6.

Step 2 Connect one side of the D-shell side of the cable to the appropriate output connector on the rear panel of the Cisco external power supply.

⚠️

Caution If the power supply cables are attached to power connectors coming from the same AC source, full redundancy will not be achieved. To ensure full redundancy, make sure the power connectors have different AC sources.

Step 3 Connect the other side of the D-shell cable to an output connector that is not on the same AC power input, as follows:

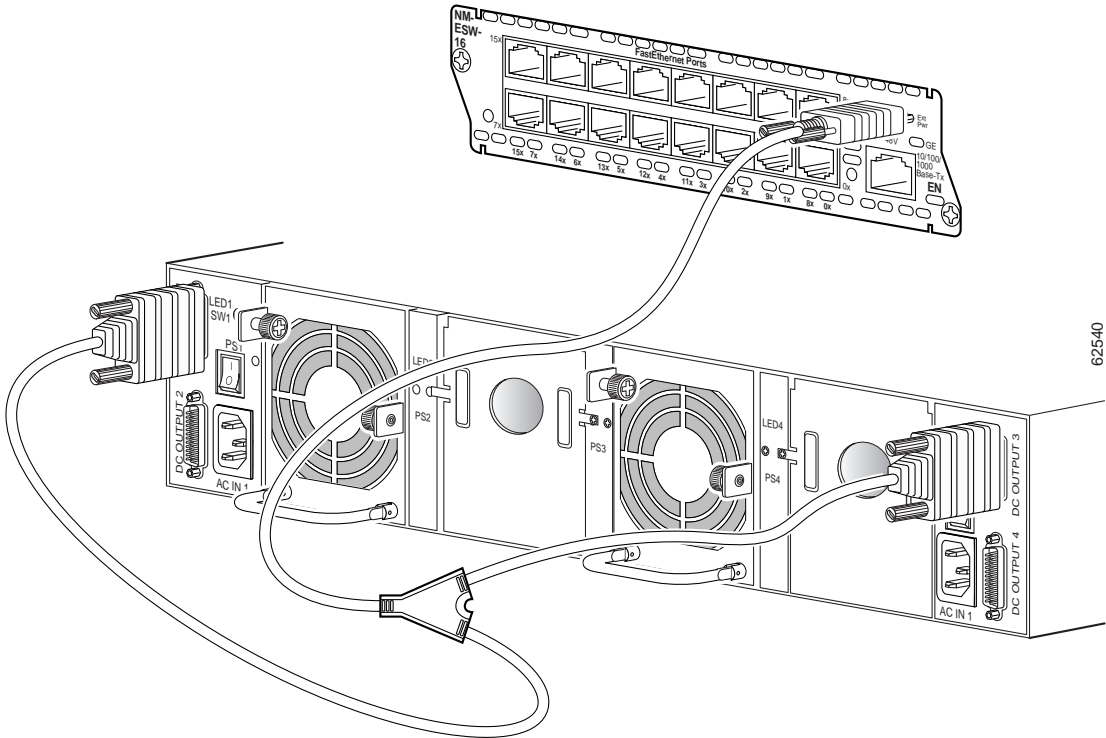| AC Power Source	DC Power Supply
AC input 1	DC module 1
	DC module 2
AC input 2	DC module 3
	DC module 4

⚠️

Caution The mounting screws on the power supply cables should be tightened securely.

Step 4 Ensure that the LEDs are green and the power supply is working properly. See the "LEDs" section on page 1-6 for LED descriptions.

Figure 5-6   Connecting Redundant Cisco External Power Supplies to the Cisco Ethernet Switch Network Module