

## Cisco Unified IP Phone Power Injector

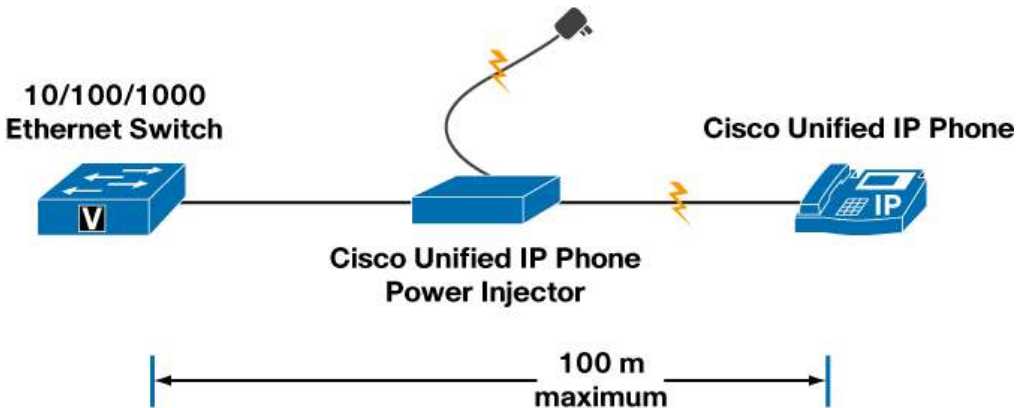
The Cisco® Unified IP Phone Power Injector (Figure 1) increases the deployment flexibility of Cisco Unified IP phones by providing an alternative powering option to local power, multiport power patch panels, and inline-power-capable switches.

Figure 1. Cisco Unified IP Phone Power Injector (Front, Back, and Stacked Views)



The Cisco Unified IP Phone Power Injector is a midspan power injector designed and tested for use with Cisco Unified IP phones. The Cisco Unified IP Phone Power Injector sits between a switch port and the Cisco Unified IP phone, providing inline power capability to an unpowered switch port. It supports Cisco midspan power, IEEE 802.3af modes for supplying power to the attached phone, and 10/100/1000BASE-T Ethernet connections. Figure 2 shows the maximum distance of the Cisco Unified IP Phone Power Injector between a Cisco Unified IP phone and an Ethernet switch.

Figure 2. Network Diagram



## FEATURES

The Cisco Unified IP Phone Power Injector offers several features, including:

- A desktop and desk-area single-port midspan injector with integrated power
- 802.3af/IEEE Power over Ethernet (PoE) support
- Gigabit Ethernet support
- Full enterprise-level compliance
- Designed and tested for use with Cisco Unified IP Phones

## SPECIFICATIONS

Table 1 lists specifications of the Cisco Unified IP Phone Power Injector.

**Table 1.** Specifications of the Cisco Unified IP Phone Power Injector

| Specification                   | Description   |
|---------------------------------|---|
| <b>Dimensions (H x W x D)</b>   | 1.6 x 4.6 x 5.45 in. (4.1 x 11.8 x 13.8 cm)   |
| <b>Weight</b>                   | .66 lb (.30 kg)   |
| <b>Phone casing composition</b> | Polycarbonate acrylonitrile butadiene styrene (ABS) plastic in textured dark gray color   |
| <b>Power requirements</b>       | Power is integrated (see Table 5 for country-specific power cords used for connection to AC wall outlet)  |
| <b>Part number</b>              | CP-PWR-INJ  |
| <b>LAN connection</b>           | <ul style="list-style-type: none"><li>• Maximum Ethernet cable length: 100 m from switch to device</li><li>• Type: RJ-45</li><li>• Label: DATA—Network</li></ul>  |
| <b>Device connection</b>        | <ul style="list-style-type: none"><li>• Maximum Ethernet cable length: 100 m from switch to device</li><li>• Type: RJ-45</li><li>• Label: DATA and PWR—PHONE</li></ul>  |
| <b>LEDs</b>                     | Two—"Power" and "Status"  |
| <b>Stackable</b>                | Yes—Two injectors can be stacked  |
| <b>Wired pairs used</b>         | Injects power into two unused pairs in the Ethernet cable: 4 and 5 (negative) and 7 and 8 (positive)  |
| <b>Electrical</b>               | <p>Input:</p> <ul style="list-style-type: none"><li>• AC input voltage range: 90 to 264 VAC</li><li>• AC input current: 0.5A (RMS) @ 90 VAC at maximum load</li><li>• AC input frequency: 47 to 63 Hz</li><li>• Maximum inrush current: 20A @ 115 VAC, 60 Hz, Cold Start, 25°C<br/>40A @ 230 VAC, 50 Hz, Cold Start, 25°C</li></ul> <p>Output:</p> <ul style="list-style-type: none"><li>• DC output voltage: 48 VDC nominal</li><li>• Maximum output power: 15.5W @ 48 VDC</li></ul> <p>Performance efficiency:</p> <ul style="list-style-type: none"><li>• 53% minimum at 30–49% of maximum load and 120 VAC, 60 Hz</li><li>• 75% minimum at 50–100% of maximum load and 120 VAC, 60 Hz</li></ul> |

## TEMPERATURE

Table 2 gives temperature ratings for the Cisco Unified IP Phone Power Injector.

**Table 2.** Temperature Ratings for Cisco Unified IP Phone Power Injector

| Temperature Variable  | Description               |
|-----------------------|---------------------------|
| Operating temperature | 32 to 104°F (0 to 40°C)   |
| Relative humidity     | 10 to 95% (noncondensing) |
| Storage temperature   | 14 to 140°F (–10 to 60°C) |

## CERTIFICATIONS

Table 3 gives certifications for the Cisco Unified IP Phone Power Injector.

**Table 3.** Certifications for Cisco Unified IP Phone Power Injector

| Certification                       | Description  |
|-------------------------------------|--|
| Regulatory compliance               | <ul style="list-style-type: none"><li>• CE marking</li></ul>   |
| Safety                              | <ul style="list-style-type: none"><li>• Underwriters Laboratories (UL) 60950</li><li>• Canadian Standards Association (CSA) C22.2 No. 60950</li><li>• IEC 60950</li><li>• EN 60950</li><li>• AS/NZS 60950</li></ul>  |
| Electromagnetic compatibility (EMC) | <ul style="list-style-type: none"><li>• Federal Communications Commission (FCC) Part 15 (CFR 47) Class B</li><li>• ICES-003 Class B</li><li>• EN55022 Class B</li><li>• CISPR22 Class B</li><li>• AS/NZ 3548 Class B</li><li>• VCCI Class B</li><li>• EN55024</li><li>• EN 50082-1</li><li>• EN 61000-3-2</li><li>• EN 61000-3-3</li><li>• CISPR24</li><li>• EN61000-6-1</li></ul> |

## ORDERING INFORMATION

Table 4 gives ordering information for the Cisco Unified IP Phone Power Injector.

**Table 4.** Ordering Information for Cisco Unified IP Phone Power Injector

| Part Number | Description                                  |
|-------------|--|
| CP-PWR-INJ  | Cisco Unified IP Phone Power Injector        |
| CP-PWR-INJ= | Cisco Unified IP Phone Power Injector, spare |

## POWER CORDS

Table 5 lists the AC country power cords needed for the Cisco Unified IP Phone Power Injector. An AC power cord is required to power the unit.

**Table 5.** AC Country Power Cords

| Part Number     | Description        |
|-----------------|--------------------|
| CP-PWR-CORD-AP= | Asia Pacific       |
| CP-PWR-CORD-AR= | Argentina          |
| CP-PWR-CORD-AU= | Australia          |
| CP-PWR-CORD-CE= | European Community |
| CP-PWR-CORD-CN= | China              |
| CP-PWR-CORD-JP= | Japan              |
| CP-PWR-CORD-NA= | North America      |
| CP-PWR-CORD-SW= | Switzerland        |
| CP-PWR-CORD-UK= | United Kingdom     |

## WARRANTY

The Cisco Unified IP Phone Power Injector is covered by a Cisco Systems® standard one-year replacement warranty.

## CISCO UNIFIED IP COMMUNICATIONS SERVICES AND SUPPORT

Cisco Unified IP Communications services and support reduce the cost, time, and complexity associated with implementing a converged network. Cisco and its partners have designed and deployed some of today's largest and most complex IP Communications networks—they understand how to integrate an IP Communications solution into your network.

Cisco design tools and best practices help ensure the solution best fits your business needs from the start, eliminating costly redesigns and downtime. Proven methods help ensure a sound implementation that will deliver the functions and features you expect—on time. Support services include remote network operations, network management tools to administer the converged application and network infrastructure, and technical support services.

Through these services, your organization benefits from the experience gained by Cisco and its partners. Taking advantage of this valuable experience, you can create and maintain a resilient, converged network that will meet your business needs today—and in the future.



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