Cisco Multigigabit 802.3bt Power Injector

© 2022 Cisco and/or its affiliates. All rights reserved.

Contents

Product overview 3

Features and benefits 4

Product specifications 4

Ordering information 5

Cisco Services 6

Warranty information 6

Cisco environmental sustainability 6

Cisco Capital 7

© 2022 Cisco and/or its affiliates. All rights reserved.

Cisco Multigigabit 802.3bt Power Injector is a standards-compliant power injector that can be used to power Cisco Catalyst access points requiring up to 50W power.

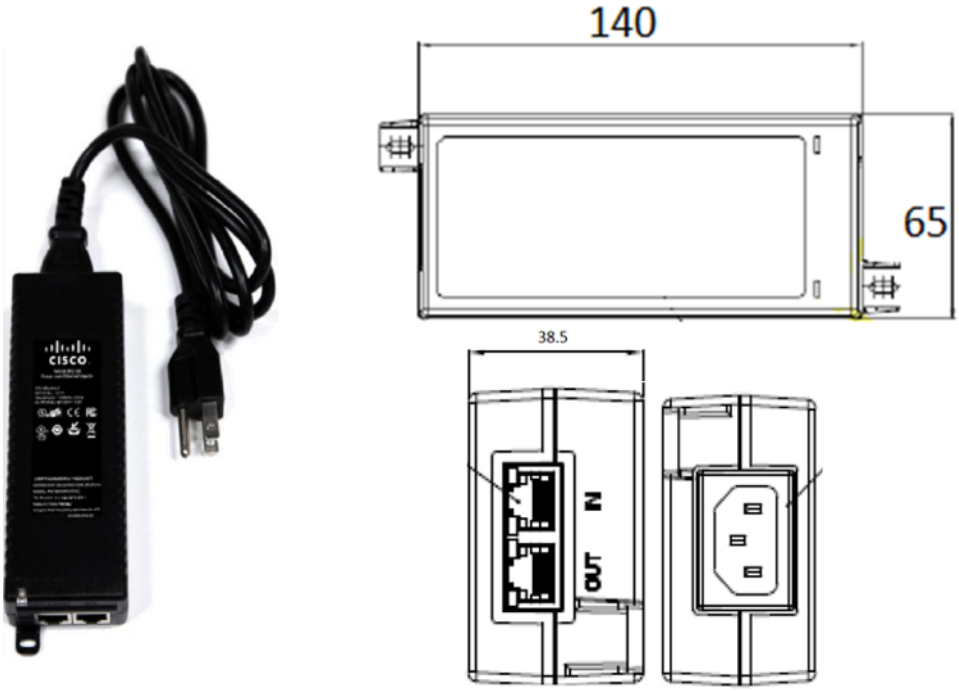


Figure 1.
Cisco Power Injector, AIR-PWRINJ7= and mechanical dimensions

Product overview

The Cisco® Multigigabit 802.3bt Power Injector (Figure 1) is a reliable, standards-compliant power injector capable of powering the latest high-performance access points and other network devices.

One of the main limitations in designing your wireless network is the availability of power. Running power cabling is also a primary cost driver of wireless installations. The Cisco Power over Ethernet (PoE) Injector allows delivery of both data and power to a Cisco access point over a single Ethernet cable, allowing deployment of devices exactly where they are needed to provide the best wireless coverage at a much lower installation cost.

The Cisco 802.3bt PoE Injector provides fully compliant 802.3bt detection, with disconnect, short-circuit, and overload protection to ensure that only 802.3bt, 802.3at, and 802.3af devices receive power, and that non-compliant devices are not accidentally damaged. Using this injector, it is possible to power the latest generation of 802.11ax devices that require higher power as well as providing multigigabit support.

Regardless of the deployment scenario, powering Cisco devices with 802.3bt Power over Ethernet with multigigabit is a flexible and low-cost method to simplify the installation process while ensuring that network design is not compromised by power availability limitations.

© 2022 Cisco and/or its affiliates. All rights reserved.

Features and benefits

The Power Injector powers reliable wired network devices that provide a robust, mobile end-user experience. Table 1 lists the injectors features and benefits.

Table 1. Features and benefits

Feature	Benefit
802.3bt standard compliant support	Fully IEEE standards compliant, providing up to 50W over 100M Ethernet connection.
Up to 5 Gbps Ethernet speeds	Supports auto-negotiation Ethernet interface with data connections at 10M, 100M, 1G, 2.5G, and 5 Gbps rates.

Product specifications

Table 2 lists the specifications for the Cisco Power Injector, AIR-PWRINJ7=.

Table 2. Specifications

Item	Specification
Nominal Input Voltage	100 ~ 240Vac
Input Voltage Range	90 ~ 264Vac
Nominal Input Frequency	50 ~ 60Hz
Input Frequency Range	47 ~ 63Hz
Input Current	2.0A Maximum
Average Efficiency	@115Vac / 60Hz >88% (on board) @230Vac / 50Hz >89% (on board)
No-Load Power Consumption	@115Vac / 60Hz <0.21W @230Vac / 50Hz <0.15W
Rated Output Voltage	56Vdc
Output Voltage Range	54 ~ 57Vdc (on board)
Output Current	0 ~ 1.161A
Leakage Current	<250uA at 264 Vac
Insulation Resistance	DC 500V 10M ohm minimum
Overvoltage	Auto-Recovery
Overload / Overcurrent	Auto-Recovery
Over Temperature	Auto-Recovery

© 2022 Cisco and/or its affiliates. All rights reserved.

Item	Specification
Short Circuit	Auto-Recovery
Interfaces	Data Input 1 x 10/100/1000/2500/5000 BASE-T autosensing (RJ-45) Data+Power Output (PoE): 1 x 10/100/1000/2500/5000 BASE-T autosensing (RJ-45) AC power input: C14 type socket
Indicators	Two Status LED indicate input power and PoE status
Dimensions (W x L x H)	(without cables): 2.6 x 5.5 x 1.5 in (65 x 140 x 38.5 mm)
Weight	0.5 lbs. (1.1 kg)
Environmental	• Operating ◦ Temperature: 14° to 104°F (-10° to 40°C) ◦ Humidity: 5% to 95% (noncondensing) ◦ Maximum altitude: 10,000 ft (3,048 m) • Nonoperating (storage and transportation) ◦ Temperature: -13° to 149°F (-25° to 65°C) ◦ Humidity: 5% to 90% (noncondensing) ◦ Maximum altitude: 15,000 ft (4500 m) @ 77°F (25°C)
Compliance	• IEC 61000-4-2, +/- 6kV • IEC 61000-4-3, 3V/m, 80%am, 1kHz, 80MHz to 1GHz Criterion A • IEC 61000-4-4. +/-1kV on input, Criterion B • IEC 61000-4-5 (lightning surge, AC Input port), 1.2/50 µs / 8/20 µs combination wave, +/-6kV from line to line,+/-6kV line to earth, Generator impedance：2ohm; Criterion B • EN55204 (lightning surge, RJ45 port), 10/700 µs wave +/-2kV all lines to earth • IEC-61000-4-6 (conducted immunity), 3V, 80%AM, 1kHz, 150 kHz-80MHz; Criterion A • CISPR 32/EN55032 Class B FCC Part 15 Class B • Safety UL, CE, CCC, IEC/UL/EN 62368

Ordering information

Table 4 provides ordering information for the Cisco Aironet Active Sensor. To place an order, visit the Cisco Ordering Home Page. To download software, visit the Cisco Software Center.

Table 3. Ordering information

Product name	Part number and description
Cisco 802.3bt Power Injector	• AIR-PWRINJ7= Power Injector (802.3bt), 5G mGig Ethernet ◦ Power cord option can be selected at time of order for AC power plug type

© 2022 Cisco and/or its affiliates. All rights reserved.

Cisco Services

Realize the full business value of your technology investments faster with intelligent, customized services. Cisco Services offers a comprehensive lifecycle of services for the new WLAN infrastructure innovations and associated WLAN solutions, including advisory, implementation, optimization, technical, managed, and training services. With unmatched wireless networking expertise, industry-leading best practices, and innovative automation tools and contextual data, we can help reduce overall upgrade, refresh, and migration costs as you introduce new wireless infrastructure, sensors, and software into your wireless network. Learn more.

Warranty information

The Cisco Aironet Active Sensor comes with a 90-day limited warranty that provides full warranty coverage of the hardware. The warranty includes 10-day advance hardware replacement and ensures that software media is defect-free for 90 days. For more details, visit https://www.cisco.com/go/warranty.

Find warranty information on Cisco.com at the Product Warranties page.

Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's Corporate Social Responsibility (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	Materials
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

© 2022 Cisco and/or its affiliates. All rights reserved.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **https://www.cisco.com/go/offices**.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Printed in USA C78-3001221-00 05/22

© 2022 Cisco and/or its affiliates. All rights reserved.