DATA SHEET

CISCO AIRONET POWER INJECTOR

Cisco Aironet® Power Injector products increase the deployment flexibility of Cisco Aironet wireless access points and bridges by providing an alternative powering option to local power, inline power-capable multiport switches, and multiport power patch panels.

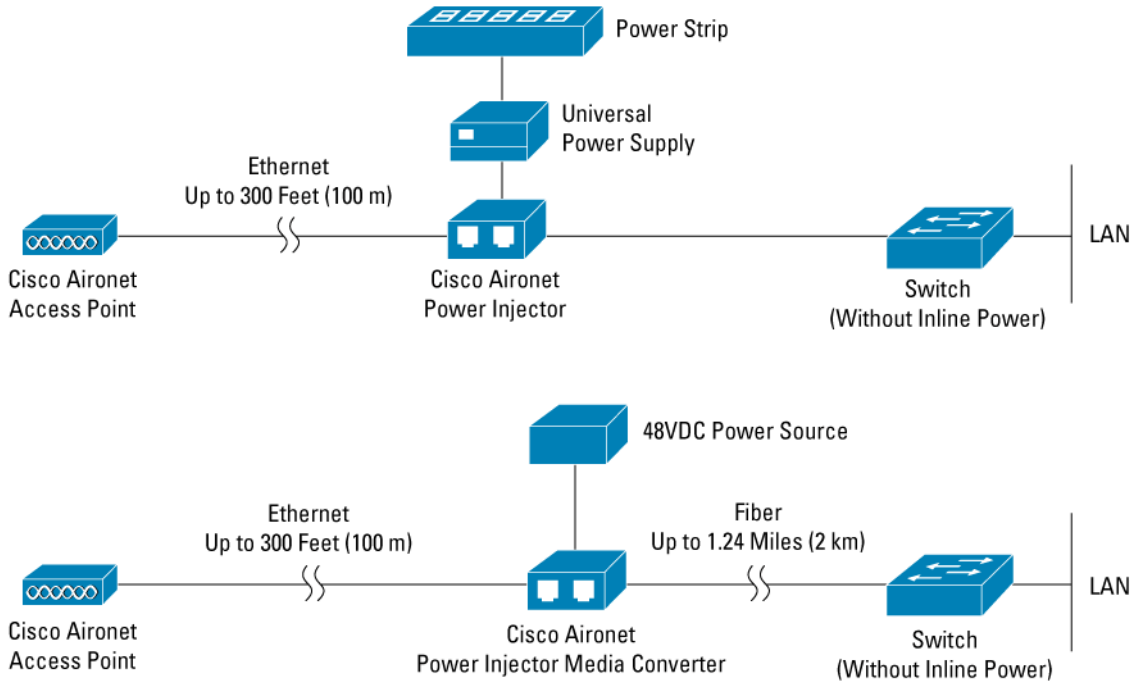
The single-port Cisco Aironet power injectors combine 48-VDC power with the data signal, sending both to the Cisco Aironet access point or bridge. Cisco Aironet 350 Series access points and bridges include an integrated power supply and injector (AIR-PWRINJ). The power injector for Cisco Aironet 1100 and 1200 series access points (AIR-PWRINJ3) works with the power supply provided with the access point.

The Cisco Aironet Power Injector Media Converter (AIR-PWRINJ-FIB) converts fiber media to Category 5 media and combines the resulting data signal with power for delivery to the access point or bridge. The power injector media converter accepts 48 VDC power from either the barrel connector of the local power supply or an alternative 48 VDC power source. When powered by an alternate 48 VDC power source connected using the provided power supply pigtail, the Power Injector Media Converter is UL2043 certified and suitable for installation in environmental air spaces. The local power supply is provided with the Cisco Aironet 1100 and 1200 series access points, while applicable local power supplies for the Cisco Aironet 350 Series access points and bridges are available separately.

All contents are Copyright © 1992–2005 Cisco Systems, Inc. All rights reserved. Important Notices and Privacy Statement.

Figure 1 illustrates possible deployment scenarios for the Power Injector and Power Injector Media Converter.

Figure 1. The Cisco Aironet Power Injectors Provide Inline Power to Cisco Aironet Access Points and Bridges



The power injectors provide up to 15 watts (depending on the Cisco power supply model) over the unused wire pairs of a Category 5 Ethernet cable, supplying enough power to provide for up to a 100-meter cable run.

PRODUCT SPECIFICATIONS

Table 1. Specifications of Cisco Aironet Power Injector

Description	Cisco Aironet Power Injector Media Converter	Cisco Aironet Power Injector for 1100, 1200 Series	350 Series Single Port Power Injector
Part Number	AIR-PWRINJ-FIB	AIR-PWRINJ3	AIR-PWRINJ
LAN Connection	• Max Fiber cable length: 2 km • Type: MT-RJ (multimode fiber) • Label: 100BASE-FX To Network • Speed: 100 Mbps • Duplex: Full	• Max Cat 5 cable length: 100 m from switch to device • Type: RJ-45 • Label: 10/100BASE-TX To Network	• Max Cat 5 cable length: 100 m • Type: RJ-45 • Label: To Network

© 2005 Cisco Systems, Inc. All rights reserved.
Important notices, privacy statements, and trademarks of Cisco Systems, Inc. can be found on cisco.com.

Description	Cisco Aironet Power Injector Media Converter	Cisco Aironet Power Injector for 1100, 1200 Series	350 Series Single Port Power Injector
Device Connection	• Max Cat 5 cable length: 100 m • Type: RJ-45 • Label: 100BASE-TX To Device • Speed: 100 Mbps • Duplex: Full • Auto MDI-X	• Max Cat 5 cable length: 100 m from switch to device • Type: RJ-45 • Label: 10/100BASE-TX To Device	• Max Cat 5 cable length: 100 m • Type: RJ-45 • Label: To AP/Bridge
LEDs	• 2 - Power Status • Uplink Connectivity	• 2 - Power Status • Device Connectivity	• 1 - Power Status and Device Connectivity
Interlockable	Yes	Yes	No
Wired Pairs Used	Injects power into two unused pairs in the Category 5 cable: 4 and 5 (negative) and 7 and 8 (positive)	Injects power into two unused pairs in the Category 5 cable: 4 and 5 (negative) and 7 and 8 (positive)	Injects power into two unused pairs in the Category 5 cable: 4 and 5 (negative) and 7 and 8 (positive)
Electrical	• Input voltage (supplied by external power supply) 48VDC ± 10%, 18 watts • Output voltage: 48 VDC	• Input voltage (supplied by external power supply) 48VDC ± 10%, 18 watts • Output voltage: 48 VDC	• Input voltage (supplied by external power supply) 48VDC ± 10%, 18 watts • Output voltage: 48 VDC
	• Input current: .380A • Output current: .320A	• Input current: .380A • Output current: .320A	• Input current: .200A • Output current: .125A
Power Supply Requirements	Cisco Aironet power supply or alternative DC power supply,* 48 VDC ± 5%, 18 watts	Cisco Aironet power supply, 48 VDC ± 5%, 18 watts	Cisco Aironet power supply, 48 VDC ± 5%, 9 watts
Dimensions	5.49 x 2.14 x 1.36 in. (13.93 x 5.43 x 3.45 cm)	5.49 x 2.14 x 1.36 in. (13.93 x 5.43 x 3.45 cm)	1 x 1.85 x 3.3 in. (2.54 x 4.70 x 8.38 cm)
Weight	4 oz.	4 oz.	3 oz.
Environmental	• 32° to 104° F (0° to 40° C) • 10-90% humidity (noncondensing) • UL 2043 certified for environmental air space installations when using supplied power supply pigtail	• 32° to 113° F (0° to 45° C) • 10-90% humidity (noncondensing)	• 32° to 104° F (0° to 40° C) • 10-90% humidity (noncondensing)

* Note that when using the provided power supply pigtail, connect it to the power source in accordance with local and national codes such as the National Electrical Code NFPA70, the Canadian Electrical Code, Part 1, C22, or IEC 364, Part 1 through 7.

© 2005 Cisco Systems, Inc. All rights reserved.
Important notices, privacy statements, and trademarks of Cisco Systems, Inc. can be found on cisco.com.

ORDERING GUIDE

For the Cisco Aironet 350 Series Access Point and bridges, the Cisco Aironet Power Injector (part number AIR-PWRINJ) is included with your product. For the Cisco Aironet 1100 and 1200 Series Access Points, the Cisco Aironet Power Injector (part number AIR-PWRINJ3) can be configured to your order. Alternatively, for all Cisco Aironet access points and bridges, the appropriate Cisco Aironet power injector, including the Cisco Aironet Power Injector Media Converter (part number AIR-PWRINJ-FIB) can be ordered separately as a spare part.

Identify your access point or bridge and select the power injector and power supply from Table 2.

Table 2. Cisco Aironet Power Injector and Supply Options*

Product	Supported Power Injector	External Power Supply
Cisco Aironet 350 Series Access Points and Bridges	AIR-PWRINJ= **	None Required **
	AIR-PWRINJ-FIB=	AIR-PWR-A= ***
Cisco Aironet 1100 Series Access Point	AIR-PWRINJ3=	AIR-PWR-A=
	AIR-PWRINJ-FIB=	AIR-PWR-A=, or external 48 VDC ± 5%
Cisco Aironet 1200 Series Access Point	AIR-PWRINJ3=	AIR-PWR-A=
	AIR-PWRINJ-FIB=	AIR-PWR-A=, or external 48 VDC ± 5%

* Note that the Cisco Aironet 1400 Series Wireless Bridge is supplied with the Power Injector LR, which is also available as a spare part (part number AIR-PWRINJ-BLR1=). The Power Injector LR only supports the 1400 Series Bridge. Please see the Cisco Aironet 1400 Series Wireless Bridge data sheet for more information on this power injector.

** The Cisco Aironet Power Injector (part number AIR-PWRINJ=) is preassembled with the power supply. No additional power supply is required.

*** The 350 Series access points and bridges do not come with a standalone power supply. To use the power injector media converter (part number AIR-PWRINJ-FIB=) with these devices, you will need to procure the power supply with the part number AIR-PWR-A=.

Cisco Aironet 1100 and 1200 series power injectors can be used with Cisco Aironet 350 Series devices, but because of the higher current demands of the Cisco Aironet 1100 and 1200 series access points, the Cisco Aironet 350 Series Power Injector cannot be used with the Cisco Aironet 1100 and 1200 series devices.

© 2005 Cisco Systems, Inc. All rights reserved.
Important notices, privacy statements, and trademarks of Cisco Systems, Inc. can be found on cisco.com.

Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Website at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Cyprus Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2005 Cisco Systems, Inc. All rights reserved. CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StrataView Plus, TeleRouter, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website 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. (0502R)

205327.I_ETMG_LS_7.05

Printed in the USA

© 2005 Cisco Systems, Inc. All rights reserved.
Important notices, privacy statements, and trademarks of Cisco Systems, Inc. can be found on cisco.com.