Data sheet

Cisco public



Cisco FM Ponte Kit

Easy and reliable wireless bridge

Contents

Quick peek	4
Product sustainability	7
Cisco Capital	8

Part of the Cisco Ultra-Reliable Wireless Backhaul solution, this entry-level wireless bridge enables backhauling of video, voice, and data. It provides a simple, out-of-the-box industrial-grade solution to create a reliable point-to-point wireless link with minimum installation time and maximum reliability. Featuring the same quality and reliability as all other Ultra-Reliable Wireless Backhaul products, the Cisco FM Ponte Kit sets a new standard for reliability and ease of use in the point-to-point wireless market.



Prodigy 2.0 reliable wireless transmission for mission-critical applications

Our Multiprotocol Label Switching (MPLS)-based transmission protocol is built to overcome the limits of standard 802.11-based wireless protocols and to deliver an infrastructure with a higher level of reliability. At the base of our innovative transmission protocol is a traffic optimization algorithm that allows every Cisco FM radio to assign a specific level of priority and reliability to every packet transmitted. The result is a better, more reliable multiservice wireless infrastructure.

Up to 50 Mbps of usable throughput, even in high-interference areas

Thanks to a 2x2 Multiple-Input, Multiple Output (MIMO) radio chip, the Cisco FM Ponte Kit is capable of delivering up to 50 Mbps of usable throughput, even in high-interference areas, at a distance of up to 3 miles in line of sight.

Web interface to configure, monitor and troubleshoot the wireless link

The Cisco FM Ponte Kit includes the FMQuadro web interface, which allows you to configure, monitor, and troubleshoot the wireless link in real time without any additional software. To simplify the configuration of the wireless network, the radio has a built-in spectrum analyzer and a real-time bandwidth-monitoring tool.

Easy installation

The IP66-rated Cisco FM Ponte Kit is designed for low visual impact and easy installation in harsh environments. To facilitate installation, it has a two-cord watertight cable gland with a standard NPT-1 thread. This feature allows you to run premade Cat5/6 shielded cables or conduit directly to the radio. The highly visible LEDs show you LAN activity and signal strength, and the low-power Power over Ethernet (PoE) injector enables an easy setup.

Industrial grade and low power consumption

With an operating temperature range between 32° to 122°F (0°C to 50°C) and wind survivability of 120 mph, the Cisco FM Ponte Kit is designed to operate in the toughest outdoor conditions. In addition, its low power consumption of 8W makes it extremely friendly to low-voltage power sources such as solar panels, wind turbines, and portable batteries.

Quick peek

Prodigy 2.0

MPLS transmission protocol with intelligent QoS

FMQuadro

Web-based interface to easily configure, monitor, and troubleshoot the network

Multifrequency

4.9 GHz and 5.1 to 5.8 GHz

Dual Ethernet ports

PoE and multiple IP devices

Low latency and higher reliability

Table 1. Cisco FMPonte Kit: PID Versions

FM P/N	Description	CISCO PID	
FM-PONTE-50	Set of two PONTE Radios. Wireless Bridge ONLY. Single MIMO, 4.9-5.8 GHz with	FLMESH-HW-KIT-1	Rest of the World version
	integrated panel antennas. Two Ethernet Ports. Includes passive PoE injector, Mounting	FLMESH-HW-KIT-1NA	NAM/LAM/Taiwan version
	Bracket, and AC 90-240V Power Supply. DOES NOT INCLUDE TS (FLUIDCARE) SUPPORT PLAN	FLMESH-HW-KIT-1UK	UK version

Radio	
Range	Up to 3 miles (5 km)*
Frequency bands	4.9 to 5.9 GHz
Throughput*	Up to 50 Mbps
Modulation	Up to 300 Mbps
Transmission power	Up to 27 dBm, depending on configuration and regulations
Receiving sensitivity	-96 dB at 6.5 Mbps

^{*} In optimal environmental conditions

Electrical	
Power input	2x passive PoE 24VDC
Power consumption	Max 8W
PoE injector	2x included, 90 to 260V IN, 24VDC OUT

Physical	
Interfaces	2 internal RJ45 ports. Shielded Cat5/6 cables and connectors are recommended
Antenna type	Built-in 2x2 MIMO panel
Antenna gain	12dBi
Polarization	Dual linear
Cross-polarization isolation	22 dB minimum
Max Voltage Standing Wave Ratio (VSWR)	2.0:1
Horizontal beamwidth coverage	33 deg
Vertical beamwidth coverage	17 deg

Communication protocols	
MPLS-based transmission protocol	Yes
Supported architecture	point - to - point

Environmental	
Operating temperature	0°C to 50°C
	32° to 122° F
Humidity	95% noncondensing
Weather rating	IP66
Wind survivability	120 mph (192Km/h)
Coupling	NPT-1 threaded cable gland
Dimensions (in)	2x 13 (H) x 6.1 (W) x 3.1(D)
Dimensions (mm)	2x 330.5 (H) x 156.6 (W) x 79.9 (D)
Weight	2x 18.34 oz (0.519 Kg)
Wind loading at 125 mph (200 Km/h)	<25 lb (11 kg)

Network	
Protocols	UDP, TCP, IP, RTP, RTCP, RTSP, HTTP, HTTPS, ICMP, ARP
Web-based interface	Yes
Multicast support	Yes
UPnP	Yes
SNMP	Yes
802.1Q VLAN	Yes

Security	
VPN	Yes
AES link-level encryption	Yes
Full compatibility with AES, 3DES, RSA, HTTPS, SSL	Yes

Supplied accessories	
PoE injector 24 VDC with US/EU/UK cord	Yes
Mounting brackets	Yes

Regulatory compliance	
FCC CFR 47 Part 15, class B	Yes
Industry Canada RSS 210	Yes
CE	Yes
Shock and vibration	ETSI 300 - 019 - 1.4

Optional software plug-ins	
AES - Link-level encryption plug-in	Yes

Cisco FM Ponte integrated software tools	
Spectrum analyzer	Antenna alignment tool FMQuadro web interface

Product sustainability

Information about Cisco's Environmental, Social and Governance (ESG) initiatives and performance is provided in Cisco's CSR and sustainability reporting.

 Table 2.
 Cisco environmental sustainability information

Sustainability Topic		Reference	
General	Information on product-material-content laws and regulations		<u>Materials</u>
Sustainability Inquiries			csr_inquiries@cisco.com
	Countries and Regions Supported		Regulatory compliance
Power	Power (Including Pluggable)		Electrical
Material	Product packaging weight and materials		environment@cisco.com
	Weight		<u>Environmental</u>
Recycled Content	Pre-Consumer	0.68%	Contact: csr inquiries@cisco.com
	Post-Consumer	2.47%	

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. <u>Learn more</u>.

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 C78-2398002-01 05/22