Cisco Wireless LAN Controllers

The Cisco® 4400 Series Wireless LAN Controller provides systemwide wireless LAN functions for medium to large-sized facilities. By automating WLAN configuration and management functions, network managers have the control, security, redundancy, and reliability needed to cost-effectively scale and manage their wireless networks as easily as they scale and manage their traditional wired networks. The Cisco 4400 Series Wireless LAN Controller (Figure 1) works in conjunction with Cisco Aironet® lightweight access points, the Cisco Wireless Control System (WCS), and the Cisco Wireless Location Appliance to support business-critical wireless data, voice, and video applications. It provides real-time communication between lightweight access points and other wireless LAN controllers to deliver centralized security policies, wireless intrusion prevention system (IPS) capabilities, award-winning RF management, quality of service (QoS), and mobility.

Figure 1. Cisco 4400 Series Wireless LAN Controller

The Cisco 4400 Series Wireless LAN Controller is available in two models. The Cisco 4402 Wireless LAN Controller with two 1 GB Ethernet ports comes in configurations that support 12, 25, and 50 access points. The Cisco 4404 Wireless LAN Controller with four 1 GB Ethernet ports supports 100 access points. The Cisco 4402 controller provides one expansion slot. The Cisco 4404 controller provides two expansion slots that can be used to add VPN termination today, as well as enhanced functionality in the future. In addition, each Cisco 4400 WLAN Controller supports an optional redundant power supply to ensure maximum availability.

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Product Specifications

Table 1 lists the product specification for Cisco 4400 Series wireless LAN controllers.

Table 1. Product Specifications for Cisco 4400 Series Wireless LAN Controllers

Item	Specification
Wireless	IEEE 802.11a, 802.11b, 802.11g, 802.11d, 802.11h
Wired/Switching/Routing	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX specification, IEEE 802.1Q VLAN tagging, and IEEE 802.1D Spanning Tree Protocol
Data Request For Comments (RFC)	• RFC 768 UDP • RFC 791 IP • RFC 792 ICMP • RFC 793 TCP • RFC 826 ARP • RFC 1122 Requirements for Internet Hosts • RFC 1519 CIDR • RFC 1542 BOOTP • RFC 2131 DHCP
Security Standards	• WPA • IEEE 802.11i (WPA2, RSN) • RFC 1321 MD5 Message-Digest Algorithm • RFC 1851 The ESP Triple DES Transform • RFC 2104 HMAC: Keyed Hashing for Message Authentication • RFC 2246 TLS Protocol Version 1.0 • RFC 2401 Security Architecture for the Internet Protocol • RFC 2403 HMAC-MD5-96 within ESP and AH • RFC 2404 HMAC-SHA-1-96 within ESP and AH • RFC 2405 ESP DES-CBC Cipher Algorithm with Explicit IV • RFC 2406 IPsec • RFC 2407 Interpretation for ISAKMP • RFC 2408 ISAKMP • RFC 2409 IKE • RFC 2451 ESP CBC-Mode Cipher Algorithms • RFC 3280 Internet X.509 PKI Certificate and CRL Profile • RFC 3602 The AES-CBC Cipher Algorithm and Its Use with IPsec • RFC 3686 Using AES Counter Mode with IPsec ESP
Encryption	• WEP and TKIP-MIC: RC4 40, 104 and 128 bits (both static and shared keys) • SSL and TLS: RC4 128-bit and RSA 1024- and 2048-bit • AES: CCM, CCMP • IPSec: DES-CBC, 3DES, AES-CBC
Authentication, Authorization, and Accounting (AAA)	• IEEE 802.1X • RFC 2548 Microsoft Vendor-Specific RADIUS Attributes • RFC 2716 PPP EAP-TLS • RFC 2865 RADIUS Authentication • RFC 2866 RADIUS Accounting • RFC 2867 RADIUS Tunnel Accounting • RFC 2869 RADIUS Extensions • RFC 3576 Dynamic Authorization Extensions to RADIUS • RFC 3579 RADIUS Support for EAP • RFC 3580 IEEE 802.1X RADIUS Guidelines • RFC 3748 Extensible Authentication Protocol • Web-based authentication

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Item	Specification
Management	• SNMP v1, v2c, v3 • RFC 854 Telnet • RFC 1155 Management Information for TCP/IP-Based Internets • RFC 1156 MIB • RFC 1157 SNMP • RFC 1213 SNMP MIB II • RFC 1350 TFTP • RFC 1643 Ethernet MIB • RFC 2030 SNTP • RFC 2616 HTTP • RFC 2665 Ethernet-Like Interface types MIB • RFC 2674 Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering, and Virtual LAN Extensions • RFC 2819 RMON MIB • RFC 2863 Interfaces Group MIB • RFC 3164 Syslog • RFC 3414 User-Based Security Model (USM) for SNMPv3 • RFC 3418 MIB for SNMP • RFC 3636 Definitions of Managed Objects for IEEE 802.3 MAUs • Cisco private MIBs
Management Interfaces	• Web-based: HTTP/HTTPS • Command-line interface: Telnet, SSH, serial port
Interfaces and Indicators	• Uplink: 2 (4402) or 4 (4404) 1000Base-X transceiver slots • LED indicators: link, activity • Service Port: 10/100 Mbps Ethernet (RJ45) • LED indicators: link, activity • Utility Port: 10/100/1000 Mbps Ethernet (RJ45) • LED indicators: link, activity • Expansion Slots: 1 (4402) or 2 (4404) • Console Port: RS232 (DB-9 male, DTE interface) • Other Indicators: Status, Alarm, Power Supply 1, Power Supply 2
Physical and Environmental	• Dimensions (WxDxH): 17.45 x 15.75 x 1.75 in. (443 x 400 x 44.5 mm) • Weight: 15.3 lbs (6.95 kg) with 2 power supplies • Temperature: • Operating: 32 to 104°F (0 to 40°C) • Storage: -13 to 158°F (-25 to 70°C) • Humidity: • Operating humidity: 10 95%, non-condensing • Storage humidity: up to 95% • Input power: 100 240 VAC; 50/60 Hz; 0.43 A at 110 VAC, 0.23 A at 220 VAC; 50W. Redundant power option available. • Heat Dissipation: 171 BTU/hour
Regulatory Compliance	• CE Mark • Safety: • UL 60950-1:2003 • EN 60950:2000 • EMI and susceptibility (Class A): • U.S.: FCC Part 15.107 and 15.109 • Canada: ICES-003 • Japan: VCCI • Europe: EN 55022, EN 55024

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Ordering Information

Table 2 provides ordering information for the Cisco 4400 Series. To place an order, visit the Cisco Ordering Website: http://www.cisco.com/en/US/ordering/index.shtml

Table 2. Ordering Information for Cisco 4400 Series Wireless LAN Controllers

Part Number	Product Name
AIR-WLC4402-12-K9	4400 Series WLAN Controller for up to 12 Cisco lightweight access points
AIR-WLC4402-25-K9	4400 Series WLAN Controller for up to 25 Cisco lightweight access points
AIR-WLC4402-50-K9	4400 Series WLAN Controller for up to 50 Cisco lightweight access points
AIR-WLC4404-100-K9	4400 Series WLAN Controller for up to 100 Cisco lightweight access points
AIR-PWR-4400-AC=	4400 Series WLAN Controller AC Power Supply (redundant)
AIR-VPN-4400-K9=	4400 Series WLAN Controller VPN Termination Module

Summary

The Cisco 4400 Series Wireless LAN Controller is ideal for enterprise and service provider wireless LAN deployments. It simplifies deployment and operation of wireless networks, helping to ensure smooth performance, enhance security, and maximize network availability. The Cisco 4400 Series Wireless LAN Controller manages all of the Cisco lightweight access points within campus environments and branch locations, eliminating complexity and providing network administrators with visibility and control of their wireless LANs.

Service and Support

Cisco offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, visit Cisco Technical Support Services or Cisco Advanced Services.

For More Information

For more information about Cisco wireless LAN controllers, contact your local account representative or visit: http://www.cisco.com/en/US/products/ps6366/index.html

For more information about the Cisco Unified Wireless Network framework, visit: http://www.cisco.com/go/unifiedwireless

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Printed in USA

C78-332267-03 11/06

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