

# Cisco 2100 Series Wireless LAN Controllers

## Product Overview

Cisco® Wireless LAN Controllers work in conjunction with Cisco Aironet access points and the Cisco Wireless Control System (WCS) to provide systemwide wireless LAN functions. As a component of the [Cisco Unified Wireless Network](#), the Cisco 2100 Series enables administrators to securely manage WLANs and mobility services, such as enhanced security, voice, guest access, and location services.

Cisco 2100 Series Wireless LAN Controllers (Figure 1) supports up to 6, 12, or 25 access points, making it a cost-effective solution for retail, enterprise branches, and small and medium-sized businesses. These controllers come with eight Ethernet ports, two of which can provide power directly to Cisco lightweight access points.

**Figure 1** Cisco 2100 Series Wireless LAN Controller



These controllers are part of a Payment Card Industry (PCI) certified architecture, and are well suited for retail customers who deploy transactional data applications such as scanners and kiosks. With performance up to 100 Mbps, the Cisco 2100 Series Wireless LAN Controllers also enable small and medium branch offices to deploy collaboration applications such as guest access and mobile voice.

While Cisco 2100 Series Wireless LAN Controllers support transaction-oriented wireless environments such as handheld scanners in retail, the Cisco 4400 Series Wireless LAN Controllers are recommended for high-data-rate and multicast-intensive applications such as large data files, video, push-to-talk.

## Cisco 2100 Series Wireless LAN Controller Models

The Cisco 2100 Series includes the models shown in Table 1.

**Table 1** Cisco 2100 Series Models and Number of Access Points Supported

2100 Series Controllers	# of Access Points Supported
Cisco 2106	6
Cisco 2112	12
Cisco 2125	25

## Wireless LAN Controller Series

The Cisco 2100 Series Wireless LAN Controllers are part of the Cisco Wireless LAN Controller family of products, which includes standalone controllers, integrated controllers, and modular wireless LAN controllers that work in conjunction with Cisco switches and routers. For details, visit: [Cisco Unified Wireless Network Overview](#).

## Features and Benefits

Table 2 describes the hardware features of the Cisco 2100 Series Wireless LAN Controllers

**Table 2** Features and Benefits of the Cisco 2100 Series Wireless LAN Controllers

Features	Benefits
<b>Eight 10/100 Ethernet Ports</b>	Provides eight 10/100 Ethernet ports, intended to support a combination of access points and redundant LAN uplinks
<b>Power-over-Ethernet-Enabled Ports</b>	Two of the eight 10/100 Ethernet ports are 802.3af Power over Ethernet (PoE) and Cisco PoE enabled, rated for use with Cisco Aironet® lightweight access points
<b>Small Form Factor</b>	Allows for convenient desktop mounting or rack mounting, with optional rack mount kit for flexible deployment
<b>Extended Secure Coverage</b>	Extended secure coverage for larger stores and warehouses
<b>PCI Integration</b>	Supports a PCI-certified architecture for retail customers
<b>Support for 802.11n</b>	Offers robust coverage with 802.11 a/b/g or delivers unprecedented reliability using 802.11n and Cisco Next-Generation Wireless Solutions and Cisco Enterprise Wireless Mesh.

## Product Specifications

Table 3 lists the product specification for Cisco 2100 Series Wireless LAN Controllers.

**Table 3** Product Specifications for the Cisco 2106 Wireless LAN Controller

Item	Specification
<b>Wireless Standards</b>	IEEE 802.11a, 802.11b, 802.11g, 802.11d, 802.11h, 802.11n
<b>Wired/Switching/Routing</b>	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX specification, and IEEE 802.1Q VLAN tagging
<b>Data RFCs</b>	<ul style="list-style-type: none"> <li>• RFC 768 UDP</li> <li>• RFC 791 IP</li> <li>• RFC 792 ICMP</li> <li>• RFC 793 TCP</li> <li>• RFC 826 ARP</li> <li>• RFC 1122 Requirements for Internet Hosts</li> <li>• RFC 1519 CIDR</li> <li>• RFC 1542 BOOTP</li> <li>• RFC 2131 DHCP</li> </ul>
<b>Security Standards</b>	<ul style="list-style-type: none"> <li>• Wi-Fi Protected Access (WPA)</li> <li>• IEEE 802.11i (WPA2, RSN)</li> <li>• RFC 1321 MD5 Message-Digest Algorithm</li> <li>• RFC 2104 HMAC: Keyed Hashing for Message Authentication</li> <li>• RFC 2246 TLS Protocol Version 1.0</li> <li>• RFC 3280 X.509 PKI Certificate and CRL Profile</li> </ul>
<b>Encryption</b>	<ul style="list-style-type: none"> <li>• WEP and Temporal Key Integrity Protocol-Message Integrity Check (TKIP-MIC): RC4 40, 104 and 128 bits (both static and shared keys)</li> <li>• Secure Sockets Layer (SSL) and Transport Layer Security (TLS): RC4 128-bit and RSA 1024- and 2048-bit</li> <li>• Advanced Encryption Standard (AES): CCM, Counter Mode with Cipher Block Chaining Message Authentication Code Protocol (CCMP)</li> </ul>

Item	Specification
<b>Authentication, Authorization, and Accounting (AAA)</b>	<ul style="list-style-type: none"> <li>• IEEE 802.1X</li> <li>• RFC 2548 Microsoft Vendor-Specific RADIUS Attributes</li> <li>• RFC 2716 PPP EAP-TLS</li> <li>• RFC 2865 RADIUS Authentication</li> <li>• RFC 2866 RADIUS Accounting</li> <li>• RFC 2867 RADIUS Tunnel Accounting</li> <li>• RFC 2869 RADIUS Extensions</li> <li>• RFC 3576 Dynamic Authorization Extensions to RADIUS</li> <li>• RFC 3579 RADIUS Support for EAP</li> <li>• RFC 3580 IEEE 802.1X RADIUS Guidelines</li> <li>• RFC 3748 Extensible Authentication Protocol</li> <li>• Web-based authentication</li> </ul>
<b>Management</b>	<ul style="list-style-type: none"> <li>• SNMP v1, v2c, v3</li> <li>• RFC 854 Telnet</li> <li>• RFC 1155 Management Information for TCP/IP-Based Internets</li> <li>• RFC 1156 MIB</li> <li>• RFC 1157 SNMP</li> <li>• RFC 1213 SNMP MIB II</li> <li>• RFC 1350 TFTP</li> <li>• RFC 1643 Ethernet MIB</li> <li>• RFC 2030 SNTP</li> <li>• RFC 2616 HTTP</li> <li>• RFC 2665 Ethernet-Like Interface types MIB</li> <li>• RFC 2674 Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering, and Virtual LAN Extensions</li> <li>• RFC 2819 RMON MIB</li> <li>• RFC 2863 Interfaces Group MIB</li> <li>• RFC 3164 Syslog</li> <li>• RFC 3414 User-Based Security Model (USM) for SNMPv3</li> <li>• RFC 3418 MIB for SNMP</li> <li>• RFC 3636 Definitions of Managed Objects for IEEE 802.3 MAUs</li> <li>• Cisco private MIBs</li> </ul>
<b>Management Interfaces</b>	<ul style="list-style-type: none"> <li>• Designed for use with Cisco Wireless Control System</li> <li>• Web-based: HTTP/HTTPS individual device manager</li> <li>• Command-line interface: Telnet, SSH, serial port</li> </ul>
<b>Interfaces and Indicators</b>	<ul style="list-style-type: none"> <li>• Console port: RS-232 (DB-9 male/RJ-45 connector included)</li> <li>• Network: Eight 10/100 Mbps Ethernet (RJ-45) including two 802.3af or Cisco PoE ports rated for use with Cisco Aironet lightweight access points</li> <li>• LED indicators: Link Activity (each 10/100 port), Power, Status, Alarm, Access Point Joined</li> </ul>
<b>Physical and Environmental</b>	<ul style="list-style-type: none"> <li>• Dimensions: 1.75 x 7.89 x 6.87 in. (4.45 x 20.04 x 17.45 cm)</li> <li>• Weight: 4.0 lbs (with power supply)</li> <li>• Temperature: <ul style="list-style-type: none"> <li>◦ Operating: 32 to 104°F (0 to 40°C)</li> <li>◦ Storage: -13 to 158°F (-25 to 70°C)</li> </ul> </li> <li>• Humidity: <ul style="list-style-type: none"> <li>◦ Operating humidity: 10 to 95 percent, noncondensing</li> <li>◦ Storage humidity: Up to 95 percent</li> </ul> </li> <li>• Power adapter: Input power: 100 to 240 VAC; 50/60 Hz</li> <li>• Heat Dissipation: 72 BTU/hour</li> </ul>

Item	Specification
Regulatory Compliance	<ul style="list-style-type: none"><li>• CE Mark</li><li>• Safety:<ul style="list-style-type: none"><li>◦ UL 60950-1:2003</li><li>◦ EN 60950:2000</li></ul></li><li>• EMI and susceptibility (Class B):<ul style="list-style-type: none"><li>◦ U.S.: FCC Part 15.107 and 15.109</li><li>◦ Canada: ICES-003</li><li>◦ Japan: VCCI</li><li>◦ Europe: EN 55022, EN 55024</li></ul></li></ul>

## Ordering Information

Table 4 provides ordering information for the Cisco 2100 Series Wireless LAN Controllers. To place an order, visit the Cisco ordering website:

<http://www.cisco.com/en/US/ordering/index.shtml>

**Table 4** Ordering Information for Cisco 2100 Series Wireless LAN Controllers

Part Number	Product Name
<b>AIR-WLC2106-K9</b>	Cisco 2106 Wireless LAN Controller for up to six Cisco access points
<b>AIR-WLC2112-K9</b>	Cisco 2112 Wireless LAN Controller for up to twelve Cisco access points
<b>AIR-WLC2125-K9</b>	Cisco 2125 Wireless LAN Controller for up to twenty-five Cisco access points

## 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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