DATA SHEET

CISCO AIRONET 802.11G 1100 AND 1200 SERIES ACCESS POINT UPGRADE KIT

PRODUCT OVERVIEW

The Cisco Aironet® IEEE 802.11g 1100 and 1200 Series Access Point Upgrade Kit provides customers with an easy and cost-effective migration path to the IEEE 802.11g standard for high-speed 2.4 GHz wireless networking. Cisco Aironet products set the enterprise standard for high-performance, secure, manageable, and flexible wireless local-area networks (WLANs), and the Cisco Aironet Upgrade Kit delivers upon the Cisco Aironet commitment to protect customers' current and future wireless network investments.

DELIVERING INVESTMENT PROTECTION

The Cisco Aironet 802.11g Upgrade Kit allows customers to take advantage of the new 802.11g technology, with its higher 54-Mbps throughput and its 802.11b backward capability, while continuing to use their existing Cisco Aironet WLAN infrastructures. Because 802.11g and 802.11b operate in the same 2.4-GHz unlicensed band, migrating to 802.11g is an affordable choice for customers with existing Cisco Aironet 1100 Series and 1200 Series access points. As bandwidth and scalability requirements grow, network administrators can strategically migrate existing 802.11b access points quickly and seamlessly as time and budgets allow.

GREATER CAPACITY MADE EASY

The Cisco Aironet 802.11g Upgrade Kit provides an easy and cost-effective means to increase the capacity of your wireless network with a simple radio upgrade. A standard Philips screwdriver can be used to upgrade the Cisco Aironet 1100 Series Access Point. An Allen wrench, supplied with the upgrade kit, is all you need to access the embedded radio to upgrade the Cisco Aironet 1200 Series Access Point. Simply remove the existing 802.11b radio, and insert the new 802.11g radio and upgrade firmware. No other steps are required.

PRODUCT SPECIFICATIONS

Part Number	• AIR-MP21G-A-K9 • AIR-MP21G-E-K9 • AIR-MP21G-J-K9 • AIR-MP21G-I-K9 Regulatory Domains: • A=Americas • E=ETSI • J=TELEC (Japan) • I=Israel Customers are responsible for verifying approval for use in their particular countries. Please see http://www.cisco.com/go/aironet/compliance to verify approval and to identify the regulatory domain that corresponds to a particular country.
Radio Module Form Factor	• Mini-PCI Type IIIA

Data Rates Supported	• 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps
Network Standard	• IEEE 802.11b and 802.11g
Operating Voltage	• 3.3 V (±0.3 V)
Wireless Medium	• 802.11g: • Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Divisional Multiplexing (OFDM)
Modulation	• Direct Sequence Spread Spectrum – DBPSK @ 1 Mbps – DQPSK @ 2 Mbps – CCK @ 5.5 and 11 Mbps • Orthogonal Frequency Division Modulation – BPSK @ 6 and 9 Mbps – QPSK @ 12 and 18 Mbps – 16-QAM @ 24 and 36 Mbps – 64-QAM @ 48 and 54 Mbps
Frequency Band	• 2.412 to 2.462 GHz (FCC) • 2.412 to 2.472 GHz (ETSI) • 2.412 to 2.484 GHz CCK: (TELEC) • 2.412 to 2.472 GHz OFDM: (TELEC) • 2.432 to 2.447 GHz (Israel)
Media Access Protocol	• Carrier sense multiple access with collision avoidance (CSMA/CA)
Nonoverlapping Channels	• Three
Receive Sensitivity (typical)	• 1 Mbps: -95 dBm • 2 Mbps: -91 dBm • 5.5 Mbps: -89 dBm • 6 Mbps: -90 dBm • 9 Mbps: -84 dBm • 11 Mbps: -88 dBm • 12 Mbps: -82 dBm • 18 Mbps: -80 dBm • 24 Mbps: -77 dBm • 36 Mbps: -73 dBm • 48 Mbps: -72 dBm • 54 Mbps: -72 dBm

Receiver Delay Spread	• 500 ns @ 1 Mbps • 400 ns @ 2 Mbps • 300 ns @ 5.5 Mbps • 300 ns @ 6 Mbps • 300 ns @ 9 Mbps • 140 ns @ 11 Mbps • 300 ns @ 12 Mbps • 300 ns @ 18 Mbps • 240 ns @ 24 Mbps • 240 ns @ 36 Mbps • 120 ns @ 48 Mbps • 120 ns @ 54 Mbps
Available Transmit Power Settings	DSSS: • 20 dBm (100mW) • 17 dBm (50 mW) • 15 dBm (30 mW) • 13 dBm (20 mW) • 10 dBm (10 mW) • 7 dBm (5 mW) • 0 dBm (1 mW) OFDM: • 15 dBm (30 mW) • 13 dBm (20 mW) • 10 dBm (10 mW) • 7 dBm (5 mW) • 0 dBm (1 mW) Maximum power setting will vary according to individual country regulations.
Range	**Indoor: Distance across open office environment** 802.11g (30 mW with 2.2 dBi gain diversity dipole antenna): • 90 ft (27 m) @ 54 Mbps • 95 ft (29 m) @ 48 Mbps • 100 ft (30 m) @ 36 Mbps • 140 ft (42 m) @ 24 Mbps • 180 ft (54 m) @ 18 Mbps • 210 ft (64 m) @ 12 Mbps • 250 ft (76 m) @ 9 Mbps • 300 ft (91 m) @ 6 Mbps

	802.11b (100 mW with 2.2 dBi gain diversity dipole antenna): • 160 ft (48 m) @ 11 Mbps • 220 ft (67 m) @ 5.5 Mbps • 270 ft (82m) @ 2 Mbps • 410 ft (124 m) @ 1 Mbps **Outdoor:** 802.11g (30 mW with 2.2 dBi gain diversity dipole antenna): • 250 ft (76m) @ 54 Mbps • 600 ft (183 m) @ 18 Mbps • 1300 ft (396 m) @ 6 Mbps • 802.11b (100 mW with 2.2 dBi gain diversity dipole antenna) • 1000 ft (304 m) @ 11 Mbps • 2000 ft (610 m) @ 1 Mbps Ranges and actual throughput vary based upon numerous environmental factors so individual performance may differ
Compliance	• Safety: – UL 1950 – CSA 22.2 No. 950-95 – IEC 60950 – EN 60950 • Radio Approvals: – FCC Part 15.247 – RSS-210 (Canada) – EN 300.328 (Europe) – ARIB-STD 33 (Japan) – ARIB-STD 66 (Japan) – AS/NZS 3548 (Australia and New Zealand) • EMI and Susceptibility (Class B): – FCC Part 15.107 and 15.109 – ICES-003 (Canada) – VCCI (Japan) – EN 301.489-1 and -17 (Europe) • Other: – IEEE 802.11b or IEEE 802.11g – FCC Bulletin OET-65C – RSS-102

Antenna Connectors	• Ultra-mini SMT U.FL
Security	• Hardware-based algorithms for encryption • AES • Supports Cisco Wireless Security Suite
Dimensions	• 2.005 in. (50.927 mm) wide; 2.351 in. (59.715 mm) length; .185 in. (4.699 mm) height
Weight	• .56 oz (16 g)
Environmental	• Non-operating (Storage) Temperature: –40˚C to +85˚C • Operating Temperature: –30˚C to +70˚C • Humidity (non-condensing): 10 to 90%
Warranty	• One year
Wi-Fi Certification	

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