APPENDIX C

Access Point Specifications

Table C-1 lists the technical specifications for the 1240AG series access point.

Table C-1 Access Point Specifications

Category	802.11G Radio Specifications		802.11A Radio Specifications
	802.11b	**802.11g**	
Size	6.6 in. W x 8.5 in. D x 1.1 in. H 16.8 cm W x 21.6 cm D x 2.8 cm H		
Indicators	Three indicators on the 2.4 Ghz end panel: Ethernet traffic, status, and radio traffic.		
Connectors	2.4 GHz end panel (left to right) Left RP-TNC antenna connector; RJ-45 connector for serial console port connections; RJ-45 connector for 10BASE-T or 100BASE-T Ethernet connections; power connector (for plug-in 48VDC AC power module); right (primary) RP-TNC antenna connector. 5-GHz end panel (left to right) Left RP-TNC antenna connector; right (primary) RP-TNC antenna connector.		
Input Voltage	36 to 57 VDC (48 VDC nominal)		
Input Power	12.95 W (Up to 15.4 W with a 100 m CAT 5 Ethernet cable)—maximum		
Operating Temperature	Base unit: –4 to 113°F (–20 to 45°C) without mounting bracket installed –4 to 131°F (–20 to 55°C) with mounting bracket installed 1240AG series power module: 32 to 104°F (0 to 40°C)		
Storage Temperature	-40 to 185°F (-40 to 85°C)		
Humidity	10 to 90% non-condensing		
Weight	Without mounting hardware: 2 lbs (0.9 kg)		
Modulation	Complementary Code Keying (CCK)	Orthogonal Frequency Division Multiplex (OFDM)	
Subcarrier modulation	BPSK (1 Mbps) QPSK (2 Mbps) CCK (5.5 and 11 Mbps)	BPSK (6 and 9 Mbps) QPSK (12 and 18 Mbps) 16-QAM (24 and 36 Mbps) 64-QAM (48 and 54 Mbps)	BPSK (6 Mbps and 9 Mbps) QPSK (12 Mbps and 18 Mbps) 16-QAM (24 and 36 Mbps) 64-QAM (48 and 54 Mbps)

Table C-1 Access Point Specifications (continued)

Category	802.11G Radio Specifications		802.11A Radio Specifications
	802.11b	**802.11g**	
Power Output	**CCK**	**OFDM**	**OFDM**
	100 mW (20 dBm) 50 mW (17 dBm) 25 mW (14 dBm) 12 mW (11 dBm) 6 mW (8 dBm) 3 mW (5 dBm) 2 mW (2 dBm) 1 mW (-1 dBm) (Depending on the regulatory domain in which the access point is installed)	50 mW (17 dBm) 25 mW (14 dBm) 12 mW (11 dBm) 6 mW (8 dBm) 3 mW (5 dBm) 2 mW (2 dBm) 1 mW (-1 dBm) (Depending on the regulatory domain in which the access point is installed)	Autonomous access point (AIR-AP1242AG) 50 mW (17 dBm) 30 mW (15 dBm) 25 mW (14 dBm) 12 mW (11 dBm) 6 mW (8 dBm) 3 mW (5 dBm) 2 mW (2 dBm) 1 mW (-1 dBm) Lightweight access point (AIR-LAP1242AG) 50 mW (17 dBm) 25 mW (14 dBm) 12 mW (11 dBm) 6 mW (8 dBm) 3 mW (5 dBm) 2 mW (2 dBm) 1 mW (-1 dBm) (Depending on the regulatory domain in which the access point is installed)
Antenna	A diversity system with two external antenna connectors		A diversity system with two external antenna connectors.
Frequency	2.400 to 2.497 GHz (Depending on the regulatory domain in which the access point is installed)		5.15 to 5.25 GHz 5.25 to 5.35 GHz 5.475 to 5.725 GHz 5.725 to 5.85 GHz (Depending on the regulatory domain in which the access point is installed)
Data rates	1, 2, 5.5, and 11 Mbps	6, 9, 12, 18, 24, 36, 48, and 54 Mbps	

Table C-1 Access Point Specifications (continued)

Category	802.11G Radio Specifications		802.11A Radio Specifications
	802.11b	802.11g	
Typical indoor range (across open office environment)	105 ft (32 m) @ 54 Mbps 180 ft (55 m) @ 48 Mbps 260 ft (79 m) @ 36 Mbps 285 ft (87 m) @ 24 Mbps 330 ft (100 m) @ 18 Mbps 355 ft (108 m) @ 12 Mbps 365 ft (111 m) @ 11 Mbps 380 ft (116 m) @ 9 Mbps 410 ft (125 m) @ 6 Mbps 425 ft (130 m) @ 5.5 Mbps 445 ft (136 m) @ 2 Mbps 460 ft (140 m) @ 1 Mbps **Note** Measured with a 2.2 dBi dipole antenna		85 ft (26 m) @ 54 Mbps 150 ft (46 m) @ 48 Mbps 210 ft (64 m) @ 36 Mbps 230 ft (70 m) @ 24 Mbps 260 ft (79 m) @ 18 Mbps 280 ft (85 m) @ 12 Mbps 310 ft (94 m) @ 9 Mbps 330 ft (100 m) @ 6 Mbps **Note** Measured with 3.5 dBi Omni-directional antenna
Typical outdoor range	120 ft (37 m) @ 54 Mbps 350 ft (107 m) @ 48 Mbps 550 ft (168 m) @ 36 Mbps 650 ft (198 m) @ 24 Mbps 750 ft (229 m) @ 18 Mbps 800 ft (244 m) @ 12 Mbps 820 ft (250 m) @ 11 Mbps 875 ft (267 m) @ 9 Mbps 900 ft (274 m) @ 6 Mbps 910 ft (277 m) @ 5.5 Mbps 940 ft (287 m) @ 2 Mbps 950 ft (290 m) @ 1 Mbps **Note** Measured with a 2.2 dBi dipole antenna		100 ft (30 m) @ 54 Mbps 300 ft (91 m) @ 48 Mbps 425 ft (130 m) @ 36 Mbps 500 ft (152 m) @ 24 Mbps 550 ft (168 m) @ 18 Mbps 600 ft (183 m) @ 12 Mbps 625 ft (190 m) @ 9 Mbps 650 ft (198 m) @ 6 Mbps **Note** Measured with 3.5 dBi Omni-directional antenna
Compliance	The 1240 series access point complies with UL 2043 for products installed in a building's environmental air handling spaces, such as above suspended ceilings. **Caution** Only the fiber-optic power injector (AIR-PWRINJ-FIB) has been tested to UL 2043 for operation in a building's environmental air space; no other power injectors or power modules have been tested to UL 2043 and they should not be placed in a building's environmental air space, such as above suspended ceilings.		
Safety	Designed to meet: UL 60950 CAN/CSA C22.2 No. 60950 UL 2043 EN 60950 IEC 60950		
Radio Approvals	FCC Parts 15.247 Canada RSS-210 Japan ARIB-STD-33B Japan ARIB-STD-66 Europe EN-300.328		FCC Part 15.407 Canada RSS-210 Japan ARIB STD-T71 EN 301.893

Table C-1 Access Point Specifications (continued)

Category	802.11G Radio Specifications		802.11A Radio Specifications
	802.11b	802.11g	
EMI and Susceptibility	FCC Part 15.107 and 15.109 Class B ICES-003 Class B (Canada) EN 55022 B EN 60601-1-2:2001 AS/NZS 3548 Class B VCCI Class B EN 301.489-1 EN 301.489-17		
RF Exposure	OET-65C RSS-102 ANSI C95.1		