



## Technical Specifications

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This appendix provides technical specifications for the Cisco Aironet Wireless LAN Adapters.

The following topics are covered in this section:

- [Physical Specifications, page A-2](#)
- [Radio Specifications, page A-3](#)
- [Power Specifications, page A-5](#)
- [Safety and Regulatory Compliance, page A-5](#)

This section lists the technical specifications for the Cisco Aironet Wireless LAN Adapters.

**Note**

If a distinction is not made between series or client adapter type, the specification applies to all Cisco Aironet Wireless LAN Adapters (client adapters) in the 340 and 350 series.

Table A-1 contains the physical specifications for the client adapter.

**Table A-1 Physical Specifications**

<b>Size</b>	
PC card	4.5 in. L x 2.1 in. W x 0.2 in. H (11.3 cm L x 5.4 cm W x 0.5 cm H)
LM card	3.4 in. L x 2.1 in. W x 0.2 in. H (8.6 cm L x 5.4 cm W x 0.5 cm H)
PCI client adapter	5.8 in. L x 3.2 in. W x 0.5 in. H (14.7 cm L x 8.1 cm W x 1.3 cm H)
<b>Weight</b>	
PC card and LM card	1.3 oz (0.037 kg)
PCI client adapter	4.6 oz (0.13 kg)
<b>Enclosure</b>	
PC card	Extended Type II PC card
LM card	Standard Type II PC card with RF connectors
<b>Connector</b>	
PC card and LM card	68-pin PCMCIA
PCI client adapter	PCI card edge
<b>Status indicators</b>	
	Green and amber LEDs; see Chapter 9
<b>Operating temperature</b>	
350 series client adapters	–22°F to 158°F (–30°C to 70°C)
340 series client adapters	32°F to 158°F (0°C to 70°C)
<b>Storage temperature</b>	
	–40°F to 185°F (–40°C to 85°C)
<b>Humidity (non-operational)</b>	
	95% relative humidity
<b>Altitude</b>	
	Operational 9,843 ft (3000 m) @ room temperature for 2 hours Non-operational 15,000 ft (4572 m) @ room temperature for 20 hours
<b>ESD</b>	
	15 kV (human body model)

Table A-2 contains the radio specifications for the client adapters.

**Table A-2 Radio Specifications**

<b>Type</b>	Direct Sequence Spread Spectrum IEEE 802.11b compliant
<b>Power output</b>	<p>350 series client adapters</p> <ul style="list-style-type: none"> <li>100 mW (20 dBm)</li> <li>50 mW (17 dBm)</li> <li>30 mW (15 dBm)</li> <li>20 mW (13 dBm)</li> <li>5 mW (7 dBm)</li> <li>1 mW (0 dBm)</li> </ul> <p>340 series PC Card client adapters</p> <ul style="list-style-type: none"> <li>30 mW (15 dBm)</li> <li>1 mW (0 dBm)</li> </ul> <p>340 series LM card and PCI client adapter</p> <ul style="list-style-type: none"> <li>30 mW (15 dBm)</li> <li>15 mW (12 dBm)</li> <li>5 mW (7 dBm)</li> <li>1 mW (0 dBm)</li> </ul> <p><b>Note</b> The maximum output power levels are controlled by your regulatory domain; check <a href="#">Appendix D, “Channels and Antenna Settings.”</a></p>
<b>Operating frequency</b>	2.400 to 2.497 GHz (depending on the regulatory domain in which the client adapter is used). Refer to <a href="#">Appendix D, “Channels and Antenna Settings.”</a>
<b>Usable channels</b>	2412 to 2484 MHz in 5-MHz increments. Refer to <a href="#">Appendix D, “Channels and Antenna Settings.”</a>
<b>Interference rejection</b>	-35 dBc adjacent channel rejection
<b>Data rates</b>	1, 2, 5.5, and 11 Mbps
<b>Modulation</b>	Binary Phase Shift Keying (BPSK) - 1 Mbps Quaternary Phase Shift Keying (QPSK) - 2 Mbps Complementary Code Keying (CCK) - 5.5 and 11 Mbps
<b>Receiver sensitivity</b>	
350 series client adapters	<ul style="list-style-type: none"> <li>-94 dBm @ 1 Mbps</li> <li>-91 dBm @ 2 Mbps</li> <li>-89 dBm @ 5.5 Mbps</li> <li>-85 dBm @ 11 Mbps</li> </ul>
340 series client adapters	<ul style="list-style-type: none"> <li>-90 dBm @ 1 Mbps</li> <li>-88 dBm @ 2 Mbps</li> <li>-87 dBm @ 5.5 Mbps</li> <li>-83 dBm @ 11 Mbps</li> </ul>
<b>Receiver delay spread (multipath)</b>	<ul style="list-style-type: none"> <li>500 ns @ 1 Mbps</li> <li>400 ns @ 2 Mbps</li> <li>300 ns @ 5.5 Mbps</li> <li>140 ns @ 11 Mbps (350 series client adapters)</li> <li>70 ns @ 11 Mbps (340 series client adapters)</li> </ul>

**Table A-2 Radio Specifications (continued)**

<b>Range</b>	
350 series client adapters	<p>Outdoor</p> <p>2,000 ft (609.6 m) @ 1 Mbps  1,500 ft (457.2 m) @ 2 Mbps  1,000 ft (304.8 m) @ 5.5 Mbps  800 ft (243.8 m) @ 11 Mbps</p> <p>Indoor</p> <p>350 ft (106.7 m) @ 1 Mbps  250 ft (76.2 m) @ 2 Mbps  200 ft (61 m) @ 5.5 Mbps  150 ft (45.7 m) @ 11 Mbps</p> <p><b>Note</b> The above range numbers assume the use of a snap-on antenna with the LM card.</p>
340 series client adapters	<p>Outdoor</p> <p>1,500 ft (457.2 m) @ 1 Mbps  1,200 ft (365.8 m) @ 2 Mbps  800 ft (243.8 m) @ 5.5 Mbps  400 ft (121.9 m) @ 11 Mbps</p> <p>Indoor</p> <p>300 ft (91.4 m) @ 1 Mbps  225 ft (68.6 m) @ 2 Mbps  150 ft (45.7 m) @ 5.5 Mbps  100 ft (30.5 m) @ 11 Mbps</p> <p><b>Note</b> The above range numbers assume the use of a snap-on antenna with the LM card.</p>
<b>Antenna</b>	
PC card	Integrated diversity antenna
LM card	Two MMCX antenna connectors
PCI client adapter	RP-TNC connector

Table A-3 contains the power specifications for the client adapter.

**Table A-3 Power Specifications**

<b>Operational voltage</b>	5.0 V (+ or – 0.25 V)
<b>Receive current steady state</b>	
PC card and LM card	Typically 250 mA
PCI client adapter	Typically 350 mA
<b>Transmit current steady state</b>	
350 series PC card and LM card	Typically 450 mA @ 20 dBm
350 series PCI client adapter	Typically 550 mA @ 20 dBm
340 series PC card and LM card	Typically 350 mA @ 15 dBm
340 series PCI client adapter	Typically 450 mA @ 15 dBm
<b>Sleep mode steady state</b>	
350 series PC card and LM card	Typically 15 mA
350 series PCI client adapter	Typically 115 mA
340 series PC card and LM card	Typically 15 mA
340 series PCI client adapter	Typically 110 mA

Table A-4 contains the safety and regulatory compliance information for the client adapters.

**Table A-4 Safety and Regulatory Compliance**

<b>Safety</b>	Designed to meet: UL 1950 Third Ed. CSA 22.2 No. 950-95 IEC 60950 Second Ed., including Amendments 1-4 with all deviations EN 60950 Second Ed., including Amendments 1-4
<b>EMI and susceptibility</b>	FCC Part 15.107 & 15.109 Class B ICES-003 Class B (Canada) EN 55022 B AS/NZS 3548 Class B VCCI Class B EN 55024
<b>Radio approvals</b>	FCC Part 15.247 Canada RSS-139-1, RSS-210 Japan Telec 33A EN 300.328
<b>RF exposure</b>	OET-65C RSS-102 ANSI C95.1

