Cisco Aironet 2.4 GHz and 5 GHz Antennas and Accessories—Complete the Wireless Solution

Cisco Systems® offers a complete range of antennas for access point and bridge equipment that enable a customized wireless solution for almost any installation.

Cisco Aironet Antennas and Accessories

Every wireless LAN deployment is different. When engineering an in-building solution, varying facility sizes, construction materials, and interior divisions raise transmission and multipath considerations. When implementing a building-to-building solution, distance, physical obstructions between facilities, and number of transmission points must be taken into account.

Cisco is committed to providing the best access points, client adapters, and bridges in the industry—and is also committed to providing a complete solution for any wireless LAN deployment. Cisco has the widest range of antennas, cable, and accessories available from any wireless manufacturer.

Cisco offers a complete range of 2.4 GHz and 5 GHz antennas for access point and bridge equipment that enable a customized wireless solution for almost any installation.

With the Cisco FCC-approved directional and omnidirectional antennas, low-loss cable, mounting hardware, and other accessories, installers can customize a wireless solution that meets the requirements of even the most challenging applications.

Access Point Antennas

Cisco Aironet 2.4-GHz access point antennas are compatible with all Cisco RP-TNC-equipped access points. The antennas are available with different gain and range capabilities, beam widths, and form factors. Coupling the appropriate antenna and access point allows for efficient coverage in any facility, as well as better reliability at higher data rates (Table 1).

Cisco Aironet 5 GHz access point antennas have RP-TNC connectors and are compatible with Cisco Aironet 1200 Series and 1230AG Series access points when equipped with a RM22A radio module. Selection of the appropriate antenna should provide optimal coverage for the desired application in the 5 GHz frequency band (Table 2).

The Cisco Aironet 1250 Series Access Points feature multiple-input and multiple-output (MIMO) technology. These access points have 6 connectors or 3 connectors for 2.4 GHz and 3 connectors for 5 GHz. Cisco has developed antennas specifically for use with the Cisco Aironet 1250 Series Access Points but most existing antennas can also be used (Table 4).

Table 1. Cisco Aironet 2.4 GHz Access Point Antennas with RP-TNC Connectors

Feature	AIR-ANT5959	AIR-ANT3213	AIR-ANT2410Y-R
Description	Diversity omnidirectional ceiling mount	Pillar mount diversity omnidirectional	Yagi mast or wall mount
Application	Indoor unobtrusive antenna, best for ceiling mount; excellent throughput and coverage solution in high multipath cells and dense user population	Indoor, unobtrusive midrange antenna	Indoor/outdoor directional antenna for use with access points or bridges
Gain	Two separate 2-dBi omnidirectional elements; minimum gain of 2.0, maximum gain of 2.35	5.2 dBi with two radiating elements	10 dBi
Frequency	2.4 GHz	2.4 GHz	2.4 GHz
Approximate Indoor Range at 6 Mbps*	295 ft (90 m)	379 ft (121 m)	548 ft (167 m)
Approximate Indoor Range at 54 Mbps*	88 ft (27 m)	114 ft (35 m)	165 ft (50 m)
Beam Width	360°H, 80°V	360°H, 25°V	55°H, 47°V
Cable Length	3 ft (0.91 m)**	3 ft (0.91 m)	3 ft (0.91 m)
Dimensions	5.3 x 2.8 x 0.9 in. (13.5 x 7.1 x 2.3 cm)	14 x 5 x 1 in. (35.5 x 12.7 x 2.5 cm)	7.25 x 3 in. (18.4 x 7.62 cm)
Weight	7 oz (0.19 kg)	1 lb (0.45 kg)	8 oz (0.23 kg)
Operating Temperature	0° to +55°C	0° to +70°C	−30° to +70°C

* All range estimations are based on an external antenna associating with an integrated Intel Centrino client adapter under ideal conditions. The distances referenced here are approximations and should be used for estimation purposes only.
** The cable provided on noted antennas meets UL 2043 certification for plenum rating requirements set by local fire codes and supports installation in environmental air spaces such as areas above suspended ceilings.

Feature	AIR-ANT1728	AIR-ANT4941	AIR-ANT2422DG-R**	AIR-ANT2422DW-R
Description	Omnidirectional ceiling mount	2.2-dBi black dipole antenna	2.2 dBi gray non-articulating dipole antenna	2.2-dBi white dipole antenna
Application	Indoor midrange antenna, typically hung from crossbars of drop ceilings	Indoor omnidirectional coverage	Indoor omnidirectional coverage	Indoor omnidirectional coverage
Gain	5.2 dBi	2.2 dBi	2.2 dBi	2.2 dBi
Frequency	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz
Approximate Indoor Range at 6 Mbps*	379 ft (116 m)	300 ft (91 m)	300 ft (91 m)	300 ft (91 m)
Approximate Indoor Range at 54 Mbps*	114 ft (35 m)	90 ft (27 m)	90 ft (27 m)	90 ft (27 m)

Feature	AIR-ANT1728	AIR-ANT4941	AIR-ANT2422DG-R**	AIR-ANT2422DW-R
Beam Width	360'H, 36'V	360'H, 65'V	360'H, 65'V	360'H, 65'V
Cable Length	3 ft (0.91 m)	None	None	None
Dimensions	Length: 11.25 in. (28.5 cm) Diameter: 1 in. (2.5 cm)	5.5 in. (14 cm)	3.9 in (9.9 cm)	5.5 in. (14 cm)
Weight	4.6 oz (0.13 kg)	1.1 oz (31 g)	1.1 oz (31 g)	1.1 oz (31 g)
Operating Temperature	0°to +55℃	0°to +55℃	0°to +55℃	0°to +55℃

* All range estimations are based on an external antenna associating with an integrated Intel Centrino client adapter under ideal conditions. The distances referenced here are approximations and should be used for estimation purposes only.
** Best suited for use on the Cisco Aironet 1250 Series Access Point but can also be used on other access points with RP-TNC connectors.

Feature	AIR-ANT2485P-R	AIR-ANT2460P-R	AIR-ANT2450S-R	AIR-ANT2465P-R
Description	Patch wall mount	Patch wall mount	Wall Mount sector	Diversity patch wall mount
Application	Indoor/outdoor, unobtrusive, long-range antenna (may also be used as a midrange bridge antenna)	Indoor/outdoor, unobtrusive, midrange antenna (may also be used as a midrange bridge antenna)	Indoor, outdoor, midrange, sector antenna (may be used as a midrange bridge antenna)	Indoor/outdoor, unobtrusive midrange antenna
Gain	8.5 dBi	6 dBi	5 dBi	6.5 dBi with two radiating elements
Frequency	2.4 GHz	2.4 GHz	2.4 GHz	2.4 GHz
Approximate Indoor Range at 6 Mbps*	507 ft (155 m)	403 ft (123 m)	379 ft (116 m)	418 ft (127 m)
Approximate Indoor Range at 54 Mbps*	153 ft (47 m)	121 ft (37 m)	114 ft (35 m)	126 ft (38 m)
Beam Width	66'H, 56'V	75'H, 73'V	135'H, 54'V	75'H, 57'V
Cable Length	3 ft (0.91 m)	3 ft (0.91 m)	3 ft (0.91 m)**	3 ft (0.91 m)**
Dimensions	5.3 x 5.3 x .90 in. (13.5 x 13.5 x 2.28 cm)	4.1 x 3.9 x .75 in. (10.4 x 9.9 x 1.9 cm)	6 x 3 x 2 in (15.2 x 7.6 x 5 cm)	5 x 6.7 x .90 in. (12.7 x 17 x 2.28 cm)
Weight	8.2 oz (0.23 kg)	6 oz (0.17 kg)	7 oz (0.2 kg)	11.6 oz (0.33 kg)
Operating Temperature	−30°to +70℃	−30°to +70℃	−30°to +70℃	−30°to + 70℃

Table 2. Cisco Aironet 5 GHz Access Point Antennas with RP-TNC Connectors

Feature	AIR-ANT5135D-R	AIR-ANT5135DG-R****	AIR-ANT5135DW-R
Description	3.5-dBi black dipole antenna	3.5 dB5 gray non-articulating dipole antenna	3.5-dBi white dipole antenna

Feature	AIR-ANT5135D-R	AIR-ANT5135DG-R****	AIR-ANT5135DW-R
Application	Indoor omnidirectional coverage	Indoor omnidirectional	Indoor omnidirectional coverage
Gain	3.5 dBi	3.5 dBi	3.5 dBi
Frequency***	5 GHz	5 GHz	5 GHz
Approximate Indoor Range at 6 Mbps*	675 ft (206 m)	675 ft (206 m)	675 ft (206 m)
Approximate Indoor Range at 54 Mbps*	75 ft (21 m)	75 ft (21 m)	75 ft (21 m)
Beam Width	360°H, 40°E	360°H, 40°E	360°H, 40°E
Cable Length	None	None	None
Dimensions	5.3 x 0.6 in. (13.5 x 1.5 cm)	3.61 x .06 in (9.2 x 1.5 cm)	5.3 x 0.6 in. (13.5 x 1.5 cm)
Weight	1 oz (28.3 g)	1 oz (28.3 g)	1 oz (28.3 g)
Operating Temperature	0°to +55°C	0°to +55°C	0°to +55°C

* All range estimations are based on an external antenna associating with an integrated Intel Centrino client under ideal conditions. The distances referenced here are approximations and should be used for estimation purposes only.
** The cable provided on noted antennas meets UL 2043 certification for plenum rating requirements set by local fire codes and supports installation in environmental air spaces such as areas above suspended ceilings.
*** 5 GHz antennas are denoted by either a blue dot on the radome or blue marker on the cable near the connector.
**** Best suited for use on the Cisco Aironet 1250 Series Access Point but can also be used on other access points with RP-TNC connectors.

Cisco Dual Band Antenna for 2.4 GHz and 5 GHz Access Points

Cisco offers a dual band antenna, or a radome which has both 2.4 GHz and 5 GHz elements in one low profile package. The antenna has 4 cables, two for 2.4 GHz and 2 for 5 GHz, color coded to prevent any accidental connections. Easy to install and lightweight, this antenna is ideal for indoor wall or ceiling mount applications (Table 3).

Table 3.   Cisco Dual Band Antenna for 2.4 GHz and 5 GHz Access Points

Feature	AIR-ANT2451V-R=
Description	Dual band: 2 dBi in 2.4 GHz and 3dBi in 5 GHz omnidirectional ceiling mount
Application	Indoor midrange antenna
Gain	2 dBi in 2.4 GHz 3 dBi in 5 GHz
Frequency*	2.4 and 5 GHz
Approximate Indoor Range at 6 Mbps**	2.4 GHz: 295 ft (90 m) 5 GHz: 675 ft (206 m)
Approximate Indoor Range at 54 Mbps**	2.4 GHz: 88 ft (27 m) 5 GHz: 75 ft (21 m)
Beam Width	2.4GHz: 360°H, 80°E 5 GHz: 360°H, 50°E
Cable Length	18 in (45.7 cm)

Feature	AIR-ANT2451V-R=
Dimensions	8.5 in. x 6 in. x .93 in (21.5 cm x 15.2 cm x 2.4cm)
Weight	1 lb (4.5 kg)
Operating Temperature	0° to +55℃

*5 GHz antennas are denoted by either a blue dot on the radome or blue marker on the cable near the connector.
** All range estimations are based on an external antenna associating with an integrated Intel Centrino client adapter under ideal conditions. The distances referenced here are approximations and should be used for estimation purposes only.

2.4 GHz and 5 GHz Access Point Antennas with RP-TNC Connectors for Cisco Aironet 1250 Series Access Points

Cisco offers antennas that can be used with the Cisco Aironet 1250 Series Access Points, which feature 802.11n technology. The antennas and access points utilize an RP-TNC type connector. Two antennas are available for the 2.4 and 5 GHz band (Table 4).

Table 4. 2.4 GHz And 5 GHz Access Point Antennas with RP-TNC Connectors for Cisco Aironet 1250 Series Access Points

Feature	AIR-ANT2430V-R	AIR-ANT5140V-R
Description	Ceiling mount omnidirectional	Ceiling mount omnidirectional
Application	Indoor carpeted area type, unobtrusive omnidirectional antennas for Cisco Aironet 1250 Series MIMO Radios	Indoor carpeted area type unobtrusive omnidirectional antenna for Cisco Aironet 1250 Series MIMO Radios
Gain	3.0 dBi	4.0 dBi
Frequency	2.4 GHz	5 GHz
Approximate Indoor Range at 6 Mbps*	507 ft (155 m)	403 ft (123 m)
Approximate Indoor Range at 54 Mbps*	153 ft (47 m)	121 ft (37 m)
Beam Width	360°H, 60°V	360°H, 45°V
Cable Length	3 ft (0.91 m) 3 cables with RP-TNC	3 ft (0.91 m) 3 cables with RP-TNC
Dimensions	12.1 x 4.2 x 1.6 in. (30.73 x 10.67 x 4.06 cm)	6.9 x 3 x .9 in (17.53 x 7.62 x 2.29 cm)
Weight	27 oz (0.76 kg)	14.1 oz (0.40 kg)
Operating Temperature	0° to +55°C	−0° to +55°C

* All range estimations are based on an external antenna associating with an integrated Intel Centrino client under ideal conditions. The distances referenced here are approximations and should be used for estimation purposes only.

Feature	AIR-ANT2451V-R=	AIR-ANT5145V-R	AIR-ANT5160V-R	AIR-ANT5170P-R	AIR-ANT5195P-R
Description	Duall band: 2 dBi in 2.4 GHz and 3dBi in 5 GHz omnidirectional ceiling mount	4.5-dBi diversity omnidirectional ceiling mount	6 dBi omnidirectional antenna	Diversity patch wall mount	Patch wall or articulating mast mount
Application	Indoor midrange antenna	Indoor midrange antenna	Indoor/outdoor midrange antenna	Indoor/outdoor directional wall mount antenna	Indoor/outdoor patch antenna provides different mounting options
Gain	2 dBi in 2.4 GHz 3 dBi in 5 GHz	4.5 dBi	6 dBi	7.0 dBi	9.5 dBi
Frequency***	2.4 and 5 GHz	5 GHz	5 GHz	5 GHz	5 GHz
Approximate Indoor Range at 6 Mbps*	2.4 GHz: 295 ft (90 m) 5 GHz: 675 ft (206 m)	732 ft (223 m)	822 ft (251 m)	880 ft (270 m)	1030 ft (313 m)
Approximate Indoor Range at 54 Mbps*	2.4 GHz: 88 ft (27 m) 5 GHz: 75 ft (21 m)	82 ft (25 m)	92 ft (28 m)	140 ft (43 m)	170 ft (52 m)
Beam Width	2.4GHz: 360°H, 80°E 5 GHz: 360°H, 50°E	360°H, 50°E	360°H, 17°E	70°H, 50°V	50°H, 43°V
Cable Length	18 in (45.7 cm)	3 ft (0.91 m)	3 ft (0.91 m)	3 ft (0.91 m)	3 ft (0.91 m)
Dimensions	8.5 in. x 6 in. x .93 in (21.5 cm x 15.2 cm x 2.4cm)	6.75 x 4.1 in. (17.1 x 10.4 cm)	12 in. length; 1 in. diameter (30.5 x 2.5 cm)	5.7 in. (14.5 cm) x 4.3 in. (10.9 cm) x 0.7 in. (1.8 cm)	5.1 in. (12.9 cm) x 5.1 in. (12.9 cm) x 1.0 in. (2.5 cm)
Weight	1 lb (4.5 kg)	11.5 oz (0.33 kg)	5.3 oz (0.15 kg)	8 oz (0.2 kg)	9 oz. (0.25 kg)
Operating Temperature	0° to +55°C	0° to +55°C	−30° to +70°C	−30° to +70°C	−30° to +70°C

* All range estimations are based on an external antenna associating with an integrated Intel Centrino client adapter under ideal conditions. The distances referenced here are approximations and should be used for estimation purposes only.
** The cable provided on noted antennas meets UL 2043 certification for plenum rating requirements set by local fire codes and supports installation in environmental air spaces such as areas above suspended ceilings.
*** 5 GHz antennas are denoted by either a blue dot on the radome or blue marker on the cable near the connector.

2.4 GHz Bridge Antennas

Cisco Aironet bridge antennas allow for extraordinary transmission distances between two or more buildings. Available in directional configurations for point-to-point transmission and omnidirectional configuration for point-to-multipoint implementations, Cisco has a bridge antenna for every application (Table 5).

Table 5. Cisco Aironet 2.4 GHz Access Point and Bridge Antennas with RP-TNC Connectors for Cisco Aironet 1200 and 1300 Series products

Feature	AIR-ANT2506	AIR-ANT24120	AIR-ANT2414S-R	AIR-ANT1949	AIR-ANT3338
Description	Omnidirectional mast mount	High-gain omnidirectional mast mount	Vertically polarized sector	Yagi mast mount	Solid dish
Application	Outdoor short-range point-to-multipoint applications	Outdoor midrange point-to-multipoint applications	Outdoor long range point-to-multipoint applications	Outdoor midrange directional connections	Outdoor long-range directional connections
Gain	5.2 dBi	12 dBi	14 dBi	13.5 dBi	21 dBi
Approximate Range at 2 Mbps*	3.3 miles (5.31 km)	15.81 miles (25.43 km)	16.71 miles (26.89 km)	18.33 miles (29.49 km)	26.49 miles (42.62 km)
Approximate Range at 11 Mbps*	1.66 miles (2.66 km)	7.92 miles (12.75 km)	8.89 miles (14.30 km)	11.19 miles (18.01 km)	20.1 miles (32.33 km)
Approximate Range at 54 Mbps*	.21 miles (.34 km)	1.0 miles (1.6 km)	1.26 miles (2.02 km)	1.41 miles (2.27 km)	4.46 miles (7.17 km)
Beam Width	360°H, 36°V	360°H, 7°V	90°H, 8.5°V	30°H, 25°V	12°H, 12°V
Cable Length	3 ft (0.91 m)	1 ft (0.30 m)	5 ft (1.5m)	3 ft (0.91 m)	2 ft (0.61 m)
Dimensions	Length: 11.5 in. (29.2 cm) Diameter: 1 in. (2.5 cm)	Length: 42 in. (107 cm) Diameter: 1.25 in. (3.1 cm)	Length: 36 in. (91 cm) Width: 6 in. (15 cm) Depth: 4 in. (10 cm)	Length: 18 in. (46 cm) Diameter: 3 in. (7.6 cm)	Diameter 24 in. (61 cm)
Weight	5 oz (0.14 kg)	1.5 lb (0.68 kg)	6.5 lb (3 kg)	12 oz (34 kg)	11 lb (5 kg)
Operating Temperature	−30° to +70℃	−30° to +70℃	−30° to +70℃	−30° to + 70℃	−30° to +70℃

* All range estimations are based on use of a BR 1310 access point and the same type of antenna at each end of the connection under ideal outdoor conditions. The distances referenced here are approximations and should be used for estimation purposes only.

Table 6 highlights the antennas for use with the Cisco Aironet 1400 Series Wireless Bridge featuring an N-type connector.

Table 6. Cisco Aironet 5.8 GHz Bridge Antennas with N-Type Connectors for Cisco Aironet 1400 Series Bridges

Feature	AIR-ANT58G9VOA-N	AIR-ANT58G10SSA-N	AIR-ANT58G28SDA-N
Description	Omnidirectional mast mount	Sector antenna, mast mount	Dish antenna, mast mount
Application	Outdoor short-range point-to-multipoint applications	Outdoor medium-range point-to-point and point-to-multipoint applications	Outdoor long-range directional connections
Gain	9.0 dBi	9.5 dBi	28.0 dBi
Frequency	5.8 GHz	5.8 GHz	5.8 GHz

Feature	AIR-ANT58G9VOA-N	AIR-ANT58G10SSA-N	AIR-ANT58G28SDA-N
Polarization	Vertical	Vertical or horizontal Field configurable	Vertical or horizontal Field configurable
Elevation Adjustment	None	None	+/– 12.5 degrees
Approximate Range at 9 Mbps*	8 miles (13 km) (with 22.5 dBi captive antenna on the remote site)	8 miles (13 km) (with 22.5 dBi captive antenna on the remote site)	23 miles (37 km) (with 28 dBi antennas on each end)
Approximate Range at 54 Mbps	2 miles (3 km) (with 22.5 dBi captive antenna on the remote site)	2 miles (3 km) (with 22.5 dBi captive antenna on the remote site)	12 miles (19 km) (with 28 dBi antennas on each end)
Beam Width	360°H, 6°V	60°H, 60°V	4.75°H, 4.75°V
Supplied Jumper Cable Length	4.9 ft. (1.5 m)	4.9 ft. (1.5 m)	4.9 ft. (1.5 m)
Dimensions	Length: 20.25 in. (51.4 cm) Diameter: .64 in. (1.62 cm)	Length: 2.5 in. (6.4 cm) Width: 2.5 in. (6.4 cm) Depth: 1.75 in. (4.5 cm)	Diameter: 29 in. (74 cm) Depth: 14.5 in. (36.8 cm)
Weight	2.0 lb. (0.9 kg)	1.25 lb. (0.6 kg)	9.5 lb. (4.3 kg)
Operating Temperature	−20°to 60°C	−20°to 60°C	−30°to 60°C

2.4 GHz and 5 GHz Antennas with N Type Connectors for the Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points

Cisco offers antennas for the Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points in various gains and antenna types. (Table 7).

Table 7. Cisco Aironet 2.4 GHz and 4.9-5 GHz Access Point Antennas with N-Type Connectors for Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points*

Feature	AIR-ANT2450V-N	AIR-ANT2455V-N	AIR-ANT2480V-N
Description	5 dBi, direct mount omnidirectional antenna for 2.4 GHz	5.5 dBi, direct mount omnidirectional antenna for 2.4 GHz	8 dBi direct mount omnidirectional antenna for 2.4 GHz
Application	Omnidirectional antenna for outdoor mesh access points. Suitable for all access point deployments, specifically for cable strand mount applications.	Omnidirectional antenna suitable for use on Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points in all deployments. Not suitable for use on Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points in cable strand mount situations.	Extended range omnidirectional antenna for outdoor mesh access points. Suitable for pole or roof mounting deployments.
Gain	5 dBi	5.5 dBi	8 dBi
Frequency	2.4 GHz	2.4 GHz	2.4 GHz
Beam Width	30°V	25°V	10°V
Cable Length	None	None	None
Dimensions	11 in. x 1 in. (27.94 x 2.54 cm)	12.5 in. x 1 in. (31.75 x 2.54 cm)	19.5 in. x 7/8 in. diameter (49.5 cm x 2.22 cm)
Weight	0.40 lbs. (0.18 kg)	0.31 lbs. (0.14 kg)	0.45 lbs. (0.20 kg)
Operating Temperature	−30°to +70 C	−30°to 70°C	−30°to +70°C

* Cisco Aironet 1500 Series Access Points are available in single-band (2.4 GHz) and dual-band (2.4 GHz and 5 GHz) versions. Check your access point for proper antenna selection before placing an order

Feature	AIR-ANT5175V-N	AIR-ANT5180V-N	AIR-ANT5114P-N	AIR-ANT5117S-N
Description	7.5 dBi omnidirectional antenna for 5 GHz	8 dBi direct mount omnidirectional antenna for 5 GHz	14 dBi wall/mast mount articulating patch antenna for 5 GHz	17 dBi, 90 degree mast mount sector antenna for 5 GHz
Application	Omnidirectional antenna suitable for use on Cisco Aironet 1500 Series Lightweight Outdoor Mesh Access Points in all deployments.	Omnidirectional antenna for Cisco Aironet 1520 series mesh access points. Suitable for all deployments, including cable strand mount applications.	Recommended for medium range point to point deployments	Recommended for point-to-multipoint deployments of medium to long range.
Gain	5 GHz bands = 7.5 dBi 4.9 GHz bands = 6 dBi	8 dBi	14 dBi	17 dBi
Frequency	4.9–5.8 GHz	4.9–5.85 GHz	4.9–5.85 GHz	4.9–5.85 GHz
Beam width	16°V	16°V	25°H, 29°E	90°H, 8°E
Cable Length	1 ft (0.30 m)	None	1 ft. (0.30 m)	None
Dimensions	11.65 in. x 1 in. (29.41 x 2.54 cm)	11 in. x 1 in. (27.94 x 2.54 cm)	4 1/8 in. x 4 1/8 in. (10.48 cm x 10.48 cm)	24 1/2 in. x 2 ½ in. (62.23 cm x 6.35 cm)
Weight	0.38 lbs. (0.17 kg)	0.4 lbs. (0.18 kg)	0.70 lbs. (0.32 kg)	1.95 lbs. (0.88 kg)
Operating Temperature	–30°to 70°C	–30°to +70 C	–30°to +70°C	–30°to + 70°C

Figure 1. Optional, Higher-Gain Antennas Extend the Range of Access Points
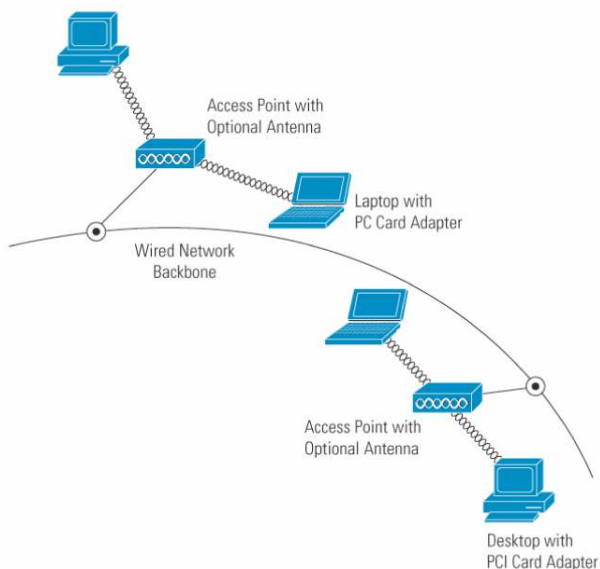
Low-Loss/Ultra-Low-Loss Cables

Low-loss cables extend the length between any Cisco Aironet 2.4 GHz and 5 GHz radio and the antenna with RP-TNC connectors. With a loss of 6.7 dB per 100 feet (30 m) for the low-loss cable and 4.4 dB for the ultra-low-loss cable, this provides installation flexibility without a significant sacrifice in range (Table 8).

Table 8. Cisco Aironet Low-Loss Antenna Cable Features

Cisco Part Number	Type of Cable	Description	Loss at 2.4 GHz	Loss at 5.8 GHz
AIR-CAB005LL-N	Interconnect	5-ft low loss cable, one straight N connector, one 90-degree N connector	0.5 dB	0.8 dB
AIR-CAB005LL-R	Interconnect	5-ft low loss cable, one RP-TNC plug, one RP-TNC jack	0.5 dB	0.8 dB
AIR-CAB010LL-N	Interconnect	10-ft low loss cable, one straight N connector, one 90-degree N connector	0.9 dB	1.5 dB
AIR-CAB020LL-R	Interconnect	20-ft low loss cable, one RP-TNC plug, one RP-TNC jack	1.3 dB	2.5 dB
AIR-CAB050LL-R	Interconnect	50-ft low loss cable, one RP-TNC plug, one RP-TNC jack	3.4 dB	5.75 dB
AIR-CAB100ULL-R	Interconnect	100-ft ultra low loss cable, one RP-TNC plug, one RP-TNC jack	4.4 dB	7.25 dB
AIR-CAB150ULL-R	Interconnect	150-ft ultra low loss cable, one RP-TNC plug, one RP-TNC jack	6.6 dB	11 dB
AIR-ACC2537-060	Bulkhead Extender	5-ft (60 inches) RG-58 type cable with one RP-TNC plug and one RP-TNC jack	2 dB	3 dB

With Cisco Aironet bridge antennas, the right mounting hardware, and qualified installation, wireless links over great distances and obstacles are possible (Figure 2).

Figure 2. Crossing Great Distances with Cisco Aironet Bridge Antennas

Accessories

To complete an installation, Cisco provides accessories that offer increased capabilities, safety, and convenience (Figure 3; Table 9).

Figure 3. Cisco Aironet Antenna Accessories for use with RP-TNC Connectors

Table 9.   Cisco Aironet Accessory Features

Feature	AIR-ACC2537-060	AIR-ACC245LA-R	AIR-ACC2662
Description	60 in. (152 cm) bulkhead extender	2.4 GHz and 5 GHz lightning arrestor	Mount to provide articulation of Yagi and AIR-ANT5195 antennas
Application	Flexible antenna cable that extends access point cabling, typically within an enclosure	Supports both 2.4 GHz and 5 GHz applications; Helps prevent damage due to lightning-induced surges or static electricity; helps prevent damage due to lightning-induced surges or static electricity	Adds swiveling capability to mast-mounted Yagi antennas and AIR-ANT5195

Power Injector Cables for Cisco Aironet 1400 Series Wireless Bridges

Typical installations will place the outdoor unit on an external mast with the power injector unit placed indoors. These cables come with a pair of F-type connectors on each end. To allow flexibility in the distance between the units, a variety of cables are available (Table 10).

Figure 4.   Cisco Aironet Power Injector Cables

Table 10.   Cisco Aironet Power Injector Cable Features

Feature	AIR-CAB020DRG6-F=	AIR-CAB050DRG6-F=	AIR-CAB100DRG6-F
Cable Length	20 ft. (6m)	50 ft. (15m)	100 ft. (30m)

Accessories

To complete an installation, Cisco provides a variety of accessories that offer increased functionality, safety, and convenience (Figure 5; Table 11).

Figure 5.   Cisco Aironet 1400 Series Bridge Accessories

Table 11. Cisco Aironet 1400 Series Bridge Accessory Features

Feature	AIR-ACCRWM1400	AIR-ACCBRGB=	AIR-ACCMFM1400=
Description	Roof/Wall mount kit	Grounding block	Multifunction mount
Application	Allows mounting to flat surfaces Includes full elevation and azimuth adjustment	Helps prevent damage due to lightning-induced surges or static electricity	Allows mounting to poles with a diameter between 1.5 in. and 2.5 in. Includes both elevation and polarization adjustment

Cisco Aironet 1300 Series Mounting Hardware

In addition to the antennas available from Cisco, the Cisco 1300 Series has different mounting options (Figure 6). These optional mounting kits are available for mounting to a roof, wall, or pole. The quick-hang mounting bracket allows a simple one-person installation.

Figure 6. Cisco Aironet 1300 Series Mounting Hardware

Mounting Kits for Cisco Aironet 1300 Series Outdoor Access Point/Bridges

A roof-mount kit is available for use with Cisco Aironet 1300 Series outdoor access points/bridges (integrated antenna and connectorized versions). A wall-mount kit is available for use with Cisco Aironet 1300 Series outdoor access points/bridges with RP-TNC type connectors. The wall-mount kit is for indoor use only. These kits must be ordered separately (Table 12).

Table 12. Mounting Kits for Cisco Aironet 1300 Series Outdoor Access Points/Bridges

Product Number	Product Description
AIR-ACCWAMK1300=	Cisco Aironet 1300 Series Wall-Mount Kit for use with **AIR-BR1310G-x-K9-R** Kit includes: • Two 1-ft RG-59 power injector cables • Wall-mount bracket • Mounting hardware
AIR-ACCRMK1300=	Cisco Aironet 1300 Series Roof-Mount Kit for use with **AIR-BR1310G-x-K9** Kit includes: • Roof-mount mast (pole and mounting base) • Multifunction mount (allows mounting to roof-mount mast, or directly to a wall) • Mounting hardware • 20-ft dual RG-6 cable assembly with F-Type connectors • 50-ft dual RG-6 cable assembly with F-Type connectors • Coaxial sealant • One Cisco Aironet grounding block • Grounding lug • Anticorrosion gel • U-bolts • Coaxial sealant • Optional 100-ft dual RG-6 cable available separately

Cisco Aironet 1500 Series Accessories

In addition to the antennas offered by Cisco for the 1500 Series, there are various accessories that are available (Table 13).

Table 13.   Cisco Aironet 1500 Series Accessories

Product Number	Product Description
AIR-ACCPMK1500=	Pole Mount Kit
AIR-PWR-ST-LT-TAP=	Streetlight Power Tap, 105-260 VAC
AIR-PWRINJ1500=	Power Injector, In 100–240VAC, Out 48 VDC
AIR-ETH1500-150=	Outdoor Ethernet Cable, 150 ft.
AIR-LAP1510KITP-A	Pole-Top Kit, 2.4 Omni 5 GHz Omni
AIR-LAP1510KITRO-A	Roof-Top Kit, 2.4 Omni 5GHz Omni
AIR-LAP1510KITRS-A	Roof-Top Kit, 2.4 Omni 5GHz Sector

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

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