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United States	1-800-653-5350	Canada	905-629-7226
United Kingdom	0800 328 2424	Asia/Pacific	+65-6796-9600
Australia	1-800-672-906	Australia/Stereich	1-505-5794-0
Denmark/Danmark	7020-1718	Finland/Suomi	9 5407 580
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Sweden/Sverige	84452900	Inside Spain	+34 91 324 40 00
Latin America	1-800-347-0178	Outside Spain	1-800-347-0178
Sales Support	+1-954-255-2610	Outside US	+1-954-255-2610
Europe/Mid-East	Contact local distributor or call		
Distributor Operations	+44 118 945 7360		

Before using the unit, it must be configured to operate in the facility's network and run your applications. If you have a problem running your unit or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the Motorola.

Service Information

Technical Specifications

Physical Specifications

Dimensions	12 inches long x 8.25 inches wide x 3.5 inches thick
Housing	Aluminum
Weight	4 lbs.

Environmental Specifications

Temperature	-30°C to 55°C (Operating), -40°C to 85°C (Storage)
Humidity	5% to 95% Non-condensing (both Operating and Storage)
Altitude	8,000 feet/2438 m @28°C (Operating) 15,000 feet/4572 m @12°C (Storage)
Electrostatic Discharge	15kV (air) @ 50% rh, 8kV (contact) @ 50% r
Drop	Bench drop 36 inches to concrete
Wind Blown Rain	40 MPH @ 0.1inch/minute, 15 minutes
Rain/Drip/Spill	IPX6 Spray @ 4L/minute, 10 minutes
Dust	IP5X 20mb vacuum max, 2 hours, stirred dust, .88g/m³

Electrical Specifications

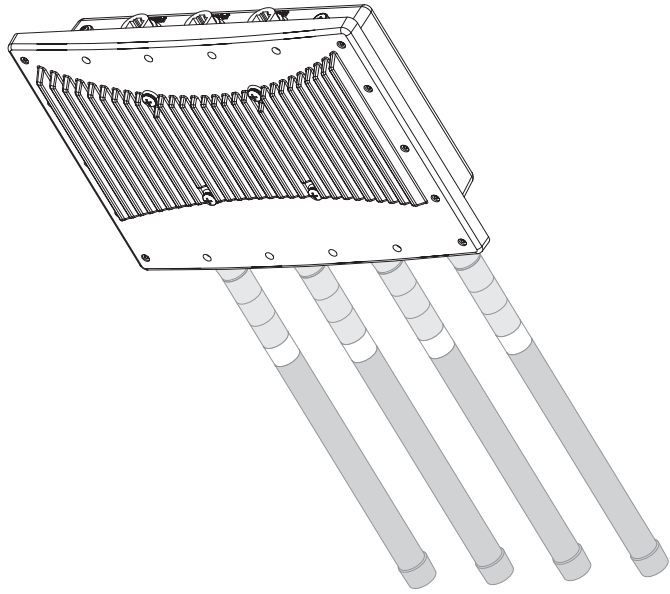
Operating Voltage	48Vdc (Nom)
Operating Current	200mA (Peak) @ 48Vdc/170mA (Nom) @ 48Vdc

Antenna Specifications

The AP-5181 2.4 GHz antenna suite includes the following models:

Part Number	Antenna Type	Nominal Net Gain (dBi)
ML-2499-FHPA5-01R	Omni-Directional	5.0
ML-2499-FHPA9-01R	Omni-Directional	9.0
ML-2452-PNA7-01R	Panel (Dual-Band)	8.0
ML-2452-PNA5-01R	Sector (Dual-Band)	6.0

Caution: The 2.4 and 5.5 GHz antenna models listed are rated for the AP-5181 model access point and its intended outdoor deployment. The models listed are not intended for use on an AP-5131 model access point.

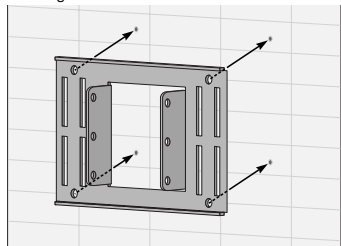


**AP-5181 Access Point
Installation Guide**

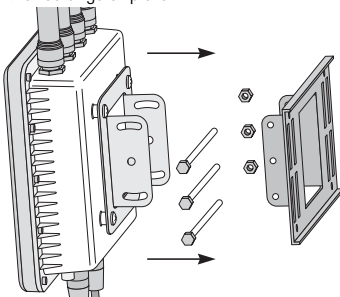
Note: The AP-5181 tilt angle may need to be adjusted during the antenna alignment process. Verify the antenna polarization angle when installing, and ensure the antennas are oriented correctly in respect to the AP-5181's coverage area.

Mounting the AP-5181 on a Wall

1. Ensure the AP-5181 is oriented properly, and attach the bracket to a wall with flat side flush against the wall. Position the bracket in the intended location and mark the positions of the four mounting screw holes.



2. Drill four holes in the wall that match the screws and wall plugs.
3. Secure the bracket to the wall.
4. Attach the square mounting plate to the AP-5181 with the supplied screws. Attach the AP-5181 to the plate on the wall.
5. Secure the AP-5181 to the bracket. Fit the edges of the V-shaped clamp parts into the slots on the flat side of the rectangular plate.



(5)

(1) If using a single-port Power-Over-Ethernet solution to supply power to the AP-5181, Motorola recommends using the AP-5181 Power Tap (Part No. AP-PSBIA5-5181-01R). This single-port power injector is designed specifically for outdoor use with the AP-5181. damage as a result of driving rain. This kit affords additional protection to shield an AP-5181 from high wind and water. If installing the AP-5181 in an outdoor area prone to high winds and rain, Motorola recommends using the AP-5181 Heavy Weather Kit (Part No. KT-5181-HW-01R). This kit affords additional protection to shield an AP-5181 from high wind and water.

To mount the AP-5181 access point to a pole (1.5 - 18 inches in diameter) or wall, an AP-5181 Mounting Kit (Part No. KT-5181-WP-01R) can be separately ordered. This kit contains the brackets and accessories required to mount the access point.

Note: A RJ-45 to Serial (9-pin D) cable is required to make a connection to the AP-5181's Console port. This cable is not supplied and must be provided by the customer.

- 1 AP-5181 802.11 a+b/g dual-radio access point (AP-5181-13040-WWR)
- 1 set of cable connectors
- 3 antenna connector dust covers
- 2 connector cover AP57 jacks, plus chain_LTW-M/9/14-SB
- 1 Waste Electrical and Equipment (WEEE) addendum

The AP-5181 access point ships with the following components:
Inspect the contents and report any missing or damaged items to your sales representative.

Verifying Package Contents

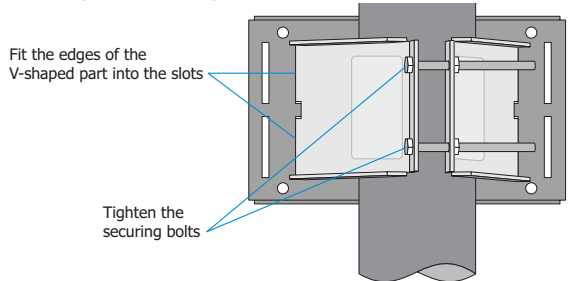
For more information, go to <http://www.symbol.com/manuals>. *Reference Guide* for detailed instructions on configuring the access point's feature set. For the AP-5181, Once secured in its intended operational position, refer to the *AP-5181 Product* documentation derived from site survey and site network analysis.

This guide is intended for the technician responsible for installing the AP-5181 model access point. It assumes the technician is familiar with basic Ethernet LAN-based networking and device installation concepts. This guide provides specifications, procedures and guidelines to use during the installation process. This guide does not provide site-specific installation procedures. For detailed site-specific installation procedures, refer to the site-specific documentation.

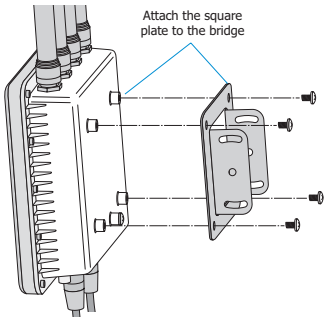
To the Installer

Mounting the AP-5181 on a Pole

1. Ensure the AP-5181 is oriented properly, and fit the edges of the V-shaped clamp parts into the slots on the flat side of the rectangular plate.
2. Place the V-shaped bracket clamp parts around the pole and tighten the nuts just enough to hold the bracket to the pole. (The bracket may need to be rotated around the pole during the antenna alignment process).



3. Attach the square mounting plate to the access point with the supplied screws.



4. Attach the AP-5181 and mounting plate to the bracket already fixed to the pole. If necessary, use the "U-bracket" (included in the mounting kit), in conjunction with the band clamp, to expand the diameter of the bracket to a maximum of 18 inches.
5. Secure the AP-5181 to the pole.

(4)

(2) Only RJ-45 data connectors should be connected to these sockets.
The Power Injector **Data In** and **Data & Power Out** ports are shielded RJ-45 sockets. A voltage mismatch can cause equipment damage and could pose a fire hazard. If the international) is used on the phase conductor. Ensure a fuse or circuit breaker no larger than 120 VAC, 3A U.S. (240VAC, 1.5A This product relies on the building installation for short-circuit (over current) protection. Follow basic electricity safety measures whenever connecting the Power Injector to its power source.
Read the installation instructions before connecting the Power Injector to a

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Warnings

- Only trained and qualified personnel should install and remove the Power Injector.
- The power cord must be a three-conductor type (two current carrying conductors and one ground conductor) terminated on one end by an IEC 60320 appliance coupler (for Power Injector connection) and on the other end by a plug containing a ground (earth) contact.
- The power cord must be rated for a minimum of 250VAC RMS operation, with a minimum rated current capacity of 5A (or a minimum wire gauge of 18AWG (0.75mm²)).
- The AC wall-socket outlet must be near the Power Injector and easily accessible.
- The Power Injector **Data In** and **Data & Power Out** ports are qualified as SELV (Safety Extra-Low Voltage) circuits according to IEC 60950. These interfaces can only be connected to SELV interfaces on other equipment.

Safety Information

Before operating any equipment, review this document for any hazards associated with installation and use of the device. Also, review standard practices for preventing accidents.

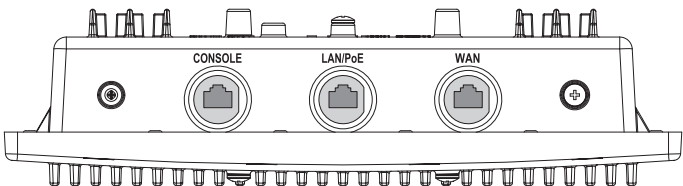
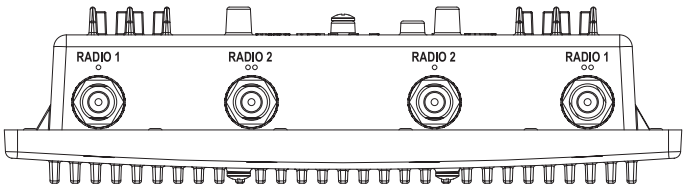
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Introduction

The AP-5181 is a ruggedized access point designed for outdoor deployments. The AP-5181 employs a dual-mode simultaneous 802.11a and 802.11g radio solution. Unlike the AP-5131 model access point, there is just the one dual-radio mechanical version of the AP-5181 (no single radio model is available).

Product Description

The AP-5181 has a separate LAN and WAN port for connecting to the network and receiving power (over the AP-5181's LAN port only). The AP-5181 has four antenna connectors (on top) supporting 802.11a and 802.11g antenna options. However, the AP-5181 antenna suite is designed for outdoor deployments, so the existing AP-5131 antenna suite should not be used with an AP-5181. The AP-5181's mode of operation is identical to the AP-5131's.



Mounting the AP-5181

The AP-5181 can be mounted to a pole (1.5 - 18 inches in diameter) or to a wall. The AP-5181 Wall Mounting Kit (Part No. KT-5181-WP-01R) is not included with AP-5181 and must be ordered separately.

The mounting bracket has four parts. One rectangular plate used for pole and wall mounting, one square plate that attaches directly to the AP-5181 and two plates forming an adjustable V-shaped clamp for pole mounting.

(3)

