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. 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.

Mounting the AP-5181 on a Wall

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. 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.

Technical Specifications

- **Dimensions**: 12 inches long x .25 inches wide x .5 inches thick
- **Housing**: Aluminum
- **Environmental Specifications**
  - **Temperature**: -30°C to 50°C (Operating)/-40°C to 50°C (Storage)
  - **Humidity**: 95% non-condensing (Operating and Storage)
  - **Atmosphere**: 800 feet/244m @ 32°C (Operating)
  - **Range**: 15,000 feet/4572 m @12°C (Storage)
- **Electrostatic Discharge**: 15kV (air) / 8kV (contact) @ 50% r.
- **Drop**: Band drop 36 inches concrete, Rain Drop, 96ms Spray @ 84Kms/h, 15 minutes
- **Wind**: 40 MPH, 0.5m/h wind, 15 minutes
- **Dust**: ESD, 5G2 dust, max. 2 hours, simulated dust, 30G/3K

**Electrical Specifications**

- **Operating Voltage**: 48Vdc (Min)
- **Operating Current**: 200mA (Min) @ 48Vdc, 170mA (Nom) @ 48Vdc

**Antenna Specifications**

The AP-5181 is a dual-band, dual-radio, access point with integrated 2.4GHz and 5GHz radios. It supports both 802.11a/b/g/n wireless standards and can operate in both infrastructure and ad-hoc modes. The AP-5181 includes two integrated antennas, one for each frequency band, providing dual-band performance. The 2.4GHz antenna supports 1x1 MIMO, while the 5GHz antenna supports 2x2 MIMO. The AP-5181 also supports HT40 and HT80 channels for improved performance in dense wireless environments. The AP-5181 is designed for use in environments with high density wireless traffic, such as airports, campuses, and large venues. It includes advanced security features such as WPA2-PSK, WPA2-EAP, and WPA-Enterprise. The AP-5181 is also compatible with 802.11a/b/g/n/ac wireless clients and includes support for IPv4 and IPv6 addressing. It includes a 10/100/1000BASE-T Ethernet port for wired connectivity and an onboard power supply for convenient installation in any environment. The AP-5181 is ideal for high-performance wireless networks requiring robust performance and advanced security features.
AP-5181 LEDs

The AP-5181 access point has four LEDs matching the functionality of the AP-5181 model access point. However, the AP-5181 LEDs are on the bottom of the access point.

Power Status – Solid white indicates the AP-5181 is adequately powered.

Error Conditions – Solid red indicates the AP-5181 has a problem requiring attention.

Ethernet Activity – Flashing amber indicates beacon and data transfers over radio.

Power and error conditions (split LED)

- Solid white indicates the AP-5181 is adequately powered.
- Flashing amber indicates beacon and data transfers over radio.
- Solid green indicates beacon and data transfers over the radio.

Note: When starting the access point in cold weather (below -30°C), there might be no LED activity even though the access point may be receiving power.

Symbol Power Injector Solutions

An AP-5181 model access point receives power via an Ethernet cable connected to the AP-5181 LAN port (using the 802.3af standard). When users purchase a Symbol WLAN solution, they often need to place access points in obscure locations. In the past, a dedicated power source was required for each access point in addition to the Ethernet infrastructure. This often required an electrical install to support power drops at each access point location. An approved 802.3af solution merges power and Ethernet into one cable, reducing the burden of installation and allows optimal access point placement in respect to the intended radio coverage area.

AP-5181 model access point uses one of two approved Symbol single-port solutions. Both the Symbol-Power Tap (Part No. AP-PSBI-5181-01R) and Symbol Power Injector (Part No. AP-PSBI-TPS-1AF-P) are integrated AC-DC converters and AP-5181 Power Injectors using 110-220V AC power to combine low-voltage DC with Ethernet data in a single cable connecting the AP-5181 to the wired network. The Symbol Power Tap (part number 802.3af compliant solution designated for indoor deployments), and may be better suited for an AP-5181 installation prone to wind and rain.

Both the Symbol Power Tap (Part No. AP-PSBI-5181-01R) and Symbol Power Injector (Part No. AP-PSBI-TPS-1AF-P) are designed to power the AP-5181 and provide protection against outdoor environments. A Power Injector or Power Tap receives power and is ready for AP-5181 connection and operation as soon as power is applied. There is no on/off switch.

Caution – The AP-5181 standards any-supported 802.3af compliant power source (including non-Symbol power sources). However, the wiring solution (including a non-compliant POE system or a solution not rated for outdoor use) could severely damage the AP-5181 and void the product warranty.

Internationals Contacts

Outside North America, contact Symbol at:
Symbol Technologies, Inc.
One Symbol Plaza
Hot Springs, AR 71913-1200
Telephone: 1-870-728-2402/1-800-SCAN-234
Fax: 1-870-728-6990
For product support and service:
Symbol Global Support Center
Telephone: 1-800-653-9350, 1-616-371-8613 (Outside North America)
Fax: 813-963-9410
Email: support@symbol.com
Or visit the Symbol Web for additional local contact numbers http://www.symbol.com/sales/contact

Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

FCC / ERO RF Exposure Guidelines

Safety Information

This device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices.

Reducing RF Exposure—Use Properly

It is advisable to use the device only in the normal operating position as described in this guide.

Remote and Standalone Antenna Configurations

To comply with FCC RF exposure requirements, antennas that are rerouted externally at remote locations or operating near users at stand-alone desktops of similar configurations must operate with a maximum separation distance of 30 cm from all persons.

Power Supply

This device is powered from a 90-264V ac 50/60Hz power source which is certified by the appropriate agencies.

Wireless Access Points

Country Selection

Select only the country in which you are using the device. Any other selection will make the operation of this device illegal.

Operation of this device in Canada

This device has been designed to operate with the antennas listed in this guide, and may not be used with any non-approved antenna. The use of non-approved antennas will not comply with the technical specifications set forth by Industry Canada.

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Customer Support

Contact Symbol

Symbol Technologies provides its customers with prompt and accurate customer support. Use the Symbol Support Center as the primary contact for any technical problem, question or service issue involving the North American. If the Symbol Customer Support specialists cannot solve a problem, access to technical details within Symbol becomes available for further assistance and support. Symbol Customer Support responds to calls by email, telephone or fax within the time limits set forth in individual contractual agreements. When contacting Symbol Customer Support, please provide the following information:

- Serial number of unit
- Model number or product name
- Software type and version number

Symbol Developer Program Web Site

http://www.symbol.com/services/msc/msc.html

Comprehensive On-line support is available at the MySymbolCare Web-site. Registration is free.

Customer Support, please provide the following information:

- Model number or product name
- Software type and version number
- Contact information for next level support

Telephone: 1-631-738-2400/1-800-SCAN 234
Fax: 1-631-738-6990

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