**Introduction**

The AP 300 Access Port is a component of the Symbol Wireless Switch System, linking wireless 802.11 a/b/g devices to the Switch, enabling growth of your wireless network with a cost-effective alternative to standard access points. The AP 300 Access Port provides two PHY layers: an Ethernet wall and ceiling. Wall mount also fits into two spaces provided. A panel on the case can secure the AP and provide a bracket for additional accessories. The AP 300 Access Port requires 802.3af-compliant power from an external source.

**Technical Specifications**

- **Operating Voltage**: 48VDC typical; 36-57VDC range
- **Operating Temperature**: -20°C to 50°C (-4°F to 122°F)
- **Operating Humidity**: 95% non-condensing
- **Storage Temperature**: -40°C to 70°C (-40°F to 158°F)
- **Storage Humidity**: 85%
- **Drop Resistance**: 40cm (15.000in.)
- **Emission Discharge**: ±1600V ±800V
- **Pinout**: UL 2043

**Dimensions & Weight**

- **Length**: 235mm (9.25in.)
- **Width**: 148mm (5.80in.)
- **Height**: 25mm (1.00in.)
- **Weight**: 0.72kg (1.60lbs)

**Radio Characteristics**

The AP 300 Access Port is an IEEE 802.11-compliant device containing one 802.11a radio and one 802.11b/g radio. The following table lists radio characteristics for each radio's frequency range:

<table>
<thead>
<tr>
<th>Device</th>
<th>Minio Data Rate Support</th>
<th>Utilizing Diversity</th>
<th>GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.11a</td>
<td>6, 9, 12, 18, 24, 36, 48, 54 OFDM</td>
<td>Transmit and receive</td>
<td>5.15-5.35GHz range</td>
</tr>
<tr>
<td>802.11b/g</td>
<td>1, 2, 5.5, 11 CDX</td>
<td>Transmit and receive</td>
<td>2.4 to 2.48GHz range</td>
</tr>
</tbody>
</table>

**AP 300 Access Port Package Contents**

- **Two wall-mount screws**
- **Two wall-anchors**
- **Light pipe**
- **Rack for light pipe**
- **Decal for badge**
- **Quick Installation Guide**

**Description**

The AP 300 Access Port is an IEEE 802.11-compliant device containing one 802.11a radio and one 802.11b/g radio. The unit supports external antennas, external wall mount, and a self-booting function. It also supports 802.11a applications, and it is required power from any US-listed, 802.3af-compliant Power over Ethernet (PoE) switch or power injector.

**Features**

- **Supports a single antenna or dual antennas in diversity mode**
- **Roewe BRC connectors for 2.4 GHz (802.11b/g) and 5 GHz (802.11a) antenna connections**

**Lock Port**

The lock port, compatible with Rapid-secure system lock, is on the side of the case.

**LED Indicators**

The unit has LED activity indicators on the front side of the case. The unit emits a steady or flashing light to indicate the device is powered on or off. The device emits a steady or flashing light to indicate error conditions, transmission, and network activity for the 802.11a (green) radio or the 802.11b (red) radio.

**Wall Mount**

The unit is mounted to the wall using the included hardware.

**Above Ceiling Mount**

The unit can also be mounted to the ceiling using the included hardware.
Suspended Ceiling Tile (Plenum) Mount

Ceiling mount requires plugging the AP 300 Access Port above a suspended ceiling and installing the provided light pipe to view the status lights of the unit.

Note: Notes or warnings about suspended ceiling mount apply to all installations where the unit is placed on suspended ceiling tile. The case has a safety wire hole for a standard safety wire.

Cautions: Symbol does not recommend mounting the AP 300 Access Port directly to any suspended ceiling tile with a thickness less than 1.7 mm (5/64 in) as it is recommended ceiling tile with an unsupported span greater than 660 mm (26 in). Symbol does strongly recommend using the AP 300 Access Port with a safety wire for the specific installation. The safety wire should be used as a standard ceiling suspension cable or equivalent steel wire between 1.59 mm (0.062 in) and 2.5 mm (0.10 in) in diameter. This placement requires installation of the provided light pipe for viewing the status lights of the unit.

Wall Mount

Wall mounting requires having the AP 300 Access Port along its width or length using the pair of slots on the bottom of the unit. The AP 300 can be mounted onto any plaster, wood, or cement surface using the provided wall anchors when necessary. The illustration shows a throughwall mount.

Wall Mount Hardware

- Two Phillips pan head self-tapping screws
- Two wall anchors (recommended) and security cable (optional)

Note: In the event that the original mounting screws are lost, the following screws can be used instead: (ANSI Standard) #6-18 X 0.875 in. Type A or AB Self-Tapping Screw, or (ANSI Standard Metric) M3.5 X 0.8 X 20mm Type D Self-Tapping Screw

Wall Mount Procedure

1. Orient the case on the wall by its width or length.
2. Using the arrows on one edge of the case as guides, mine this edge to the midpoint of the mounting area and mark points on the midpoint for the screws.
3. At each point, drill a hole in the wall, insert an anchor, screw the anchor into the wall and place the AP 300 Access Port over the screw heads and allow to sit comfortably in the wall.

Ceiling Mount Hardware

- Badge for light pipe
- Decal for badge
- Safety wire (recommended) and security cable (optional)

Ceiling Mount Procedure

1. If possible, remove the ceiling tile from its frame and place it, finished side up, on a work surface.
2. If required, install a safety wire, between 1.5 mm (0.062 in) and 2.5 mm (0.10 in) in diameter, in the ceiling space.
3. If required, install and attach a security cable to the unit’s lock port.
4. Make a mark on the upper or unfinished side of the tile.
5. Push the light pipe through the tile at the mark and remove the opposite side.
6. Snap the clips of the light pipe into the bottom of the case.
7. Fit the light pipe hole into the hole in its unfinished side.
8. Place the decal in the back of the badge and snap the badge onto the light pipe from the finished side of the tile.
9. Attach appropriate antennas to the connectors.
10. Attach any safety wire to the safety-wire point or security cable to the unit’s lock port.
11. Bring the tile into the ceiling space.
12. Plug the Ethernet cable into the unit and attach to a switch with an 802.3u compatible power source.
13. Verify that the unit is powered by observing the LEDs.
14. Place the ceiling tile back in its frame.

Suspended Antennas

Supported Antennas

Contact a Symbol sales associate for these and other available AP 300 Access Port antenna options.

2.4/2.5GHz Ragged Tip Sector Antenna

Port Number: 45-0214-0003
3.5 dBi, 360° Hemispherical

Model: AP-2413-HK

4.9GHz to 5.8GHz, 2dBi Fixed Point Dipole Antenna

Port Number: 45-0214-0004
4.9 dBi to 5.8GHz, 120° Pan-Parthen Antenna

Model: AP-5299-APA1-01

4.9GHz to 5.8GHz, 14.2dBi Patch Antenna

Port Number: 45-0214-0005
5.0 dBi to 5.8GHz, 180° Dome Antenna

Model: AP-5299-WPNA1-01

Regulatory Information

All Symbol devices are designed to comply with rules and regulations in locations where they are sold and to wall surface safely as required. Any changes or modifications to the equipment, not expressly approved by Symbol Technologies, could void the user’s authority to operate the equipment.

Use only the approved antennas. Unauthorized antennas, modifications, or attachments can cause damage and may void the warranty.

This device is to be used only with Symbol Technologies Wireless Switch.

Country Approvals

Regulatory markings apply to the device signaling the radio(s) are approved for use in the following countries: United States, Canada, Japan & Europe1,2. Please refer to the Symbol Declaration of Conformity (DoC) for details of other country markings. This is available at http://www.symbol.com/doc/

Note 1: For 2.4GHz Products: Europe includes: Austria, Belgium, Bulgaria, Czech Republic, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

Note 2: Maximum radiated transmit power of 100 mW EIRP in the frequency range 2.400 - 2.4835 GHz.

Europe: 1-8-24 Ghz RLAN's, for use through the EEA, have the following restrictions:

- Maximum radiated transmit power of 100 mW EIRP in the frequency range 2.400 - 2.4835 GHz.
- France: outdoor usage is restricted to 2.4-2.4835 GHz.
- Belgium: outdoor usage is restricted to 2.4-2.4835 GHz.
- Italy: requires a user license for outdoor use.

The use of 5GHz RLAN’s has varying restrictions for use within the EEA; please refer to the Symbol Declaration of Conformity for details at http://www.symbol.com/doc/

Statement of Compliance

Symbol Technologies, Inc., hereby, declares that this device is in compliance with the essential requirements and also other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity may be obtained from http://www.symbol.com/EC.

Other Countries

Mexico - Frequency Range to: 2.400 - 2.4835 GHz

Sri Lanka - Frequency Range to: 2.400 - 2.430 GHz

Customer Support

Symbol Technologies provides its customers with prompt and accurate customer support. Use the Symbol Support Center as the primary contact for any technical problems, questions or support issues involving Symbol products.

If the Symbol Customer Support hotline cannot solve a problem, access all technical disciplines within Symbol becomes available for further assistance and support. Symbol Customer Support corresponds to calls in e-mail, telephone or fax within the time limits set forth individual contractual agreements.

When contacting Symbol Customer Support, please provide the following information:

- Device serial number
- Product name or model number
- Software type and version number
- Network

Intercontinental Contacts

United North America, contact Symbol at:

Symbol Technologies, Inc.
One Symbol Plaza
Holtsville, New York 11742-1300
MySymbolCare http://www.symbol.com/services/msc/

United Kingdom

Symbol Developer Program http://software.symbol.com/devzone/

Other Countries

Symbol Knowledge Base http://kb.symbol.com/register.asp

Other Countries

Symbol Developer Program http://software.symbol.com/devzone/

Other Countries

Symbol Support Center phone numbers:

(14)(12)(10)(8)

Radio Transmitters (Part 15)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio Frequency Interference Requirements – Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radio Transmitters

This device complies with RSS 210 of Industry and Science Canada. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Labeling Mark: The term “IC” before the radio certification only signifies that Industry Canada technical specifications were met.

CE Marking and European Economic Area (EEA)

The use of 2.4GHz RLANs, for use through the EEA, have the following restrictions:

- Maximum radiated transmit power of 100 mW EIRP in the frequency range 2.400 - 2.4835 GHz.
- France: outdoor usage is restricted in 2.4-2.4835 GHz.
- Belgium: outdoor usage is restricted to 2.4-2.4835 GHz.
- Italy: requires a user license for outdoor use.

The use of 5GHz RLANs has varying restrictions for use within the EEA; please refer to the Symbol Declaration of Conformity for details at http://www.symbol.com/doc/