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Europe/Mid-East			Contact local distributor or call
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contact the Symbol Support Center:

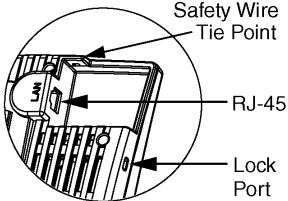
Before using the unit, it must be configured to operate in the facility's network and run your applications. If you have a problem running your unit or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will

Service Information

Firmware downloaded from the switch can be updated via the Ethernet interface from the Wireless Switch.

Lock Port

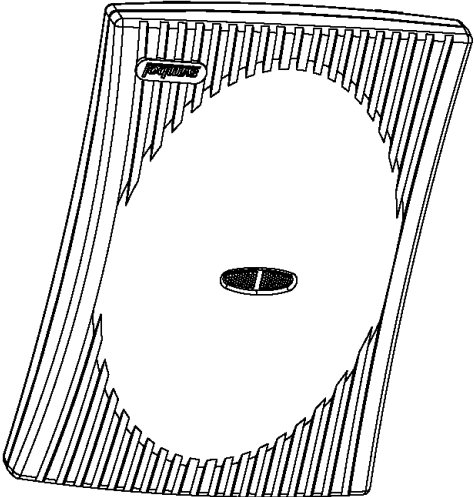
The lock port, compatible with Kensington-style security cables, is on the side of the case.



LED Indicators

The unit has LED activity indicators on the front of the case provide a status display indicating error conditions, transmission, and network activity for the 802.11a (amber) radio or the 802.11b/g (green) radio.

Task	802.11a Activity LED Amber	802.11b/g Activity LED Green
Booting	The amber LED flashes three times per second until firmware is loaded. During boot, 802.11a mobiles cannot associate.	The green LED flashes three times per second until firmware is loaded. During boot, 802.11b/g mobiles cannot associate.
Normal	After adoption, the amber LED is steady or flashes with 802.11a radio traffic.	The green LED is steady or flashes with 802.11b/g radio traffic.
Error	The amber LED flashes once per second if an error prevents the 802.11a radio from operating normally.	The green LED flashes once per second if an error prevents the 802.11b/g radio from operating normally.



WSAP-5110-100-WW
802.11a/b/g Access Port Internal Antenna Model

Quick Installation Guide

AP 300 Access Port

This product is covered by one or more of the following U.S. and foreign Patents:

Patents

<http://www.symbol.com>

Holtsville, N.Y. 11742-1300

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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 compliance. The three supported 802.11g modes are simultaneous CCK and OFDM. CCK only, or OFDM only.

Device	Mbps Data Rate Support	Utilizing Diversity	GHz
802.11a	6, 9, 12, 18, 24, 36, 48, 54	Transmit and receive	4.9 to 5.875 range
802.11b/g	1, 2, 5.5, 11 CCK 6, 9, 12, 18, 24, 36, 48, 54 OFDM	Transmit and receive	2.4 to 2.5 ISM range

AP 300 Access Port Package Contents

- AP 300 Access Port
- Two screws
- Two wall anchors
- 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 contains internal 2.4-2.5GHz and 4.9-5.285GHz antennas and supports UNII band 1, and it requires power from any UL-listed, 802.3af-compatible Power Over Ethernet (PoE) power source.

Introduction

The AP 300 Access Port, a component of the Symbol Wireless Switch System, links wireless 802.11a/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 placement options: wall and ceiling. Wall mount slots fit onto two screws provided. Arrows on the case guide placement of the screws. Clips on the back of the case fit onto a suspended ceiling T-bar.

The AP 300 Access Port receives all power and transfers data through the same CAT-5 cable. There is no additional power supply required.

Technical Specifications

Operating Voltage	48VDC typical; 36-57VDC range
Operating Current	100mA to 165mA
Peak Current	250mA
Operating Temperature	0°C to 40°C (32°F to 104°F)
Operating Humidity	5% to 95% non-condensing
Operating Altitude (max.)	2438m (8,000ft.)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Storage Humidity	85%
Storage Altitude (max.)	4572m (15,000ft.)
Drop	91cm (36in.) to concrete
Electrostatic Discharge	+/-15kV air; +/-8kV contact; +/-2kV pin

Note: The AP 300 Access Port (WSAP-5110-100-WW) supports UNII band 1.

Dimensions & Weight

Length	24.1cm (9.5in.)
Width	17.8cm (7.0in.)
Height	5.1cm (2.0in.)
Weight	0.45kg (1.0lbs)

as batteries, supplied with the Product.
EXCEPT FOR THE WARRANTY OF TITLE AND THE EXPRESS WARRANTIES STATED ABOVE, SELLER DISCLAIMS ALL WARRANTIES ON PRODUCTS FURNISHED HEREUNDER INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED IN DURATION TO THE LIMITED WARRANTY PERIOD. SOME STATES OR COUNTRIES DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS. IN SUCH STATES OR COUNTRIES, SOME EXCLUSIONS OR LIMITATIONS OF THIS LIMITED WARRANTY MAY NOT APPLY.
The stated express warranties are in lieu of all obligations or liabilities on the part of Seller for damages, including but not limited to, special, indirect or consequential damages arising out of or in connection with the use or performance of the Product or service. Seller's liability for damages to Buyer or others resulting from the use of any Product or service furnished hereunder shall in no way exceed the purchase price of said Product or the fair market value of said service, except in instances of injury to persons or property.

(E) Original Warranty Period Except for the warranty applying solely to the repaired component arising from a repair service if any, installed by Seller during manufacture of the Product.

removable data storage media, or the restoration or reinstallation of any software programs or data other than the software, if any, installed by Seller during manufacture of the Product.
replacements parts for warranty repairs. Seller is not responsible for any damage to or loss of any software programs, data or for product returned that Seller determines is not eligible for warranty repair. No charge will be made to Buyer for responsible for return shipment charges for product returned where Seller determines there is no defect ("No Defect Found").

The sole obligation of Seller for defective hardware Products is limited to repair or replacement at Seller's option on a "return to service depot" basis with prior Seller authorization. Customer is responsible for shipment to the Seller and assumes all costs and risks associated with this transportation; return shipment to the Customer will be at Seller's expense. Customer shall be responsible for return shipment charges for product returned where Seller determines there is no defect ("No Defect Found").

(D) Product Service Products may be serviced or manufactured with parts, components, or subassemblies that originate from Product, or until the end of the original warranty period, whichever is longer.

materials on the repaired component of the Product for a period of thirty (30) days from the shipment date of the repaired Product, or until the end of the original warranty period, whichever is longer.
including repairs covered by warranty, the repair services provided are warranted against defects in workmanship and (b) Spare Parts Spare parts (i.e., parts, components, or subassemblies sold by Seller for use in the service and maintenance of Products) are warranted against defects in workmanship and materials for a period of thirty (30) days from the date of shipment. Spare parts may be new or original units under the conditions set forth in subsection D below.

(C) Repair of Symbol-branded hardware for repairs on Symbol-branded hardware Products under this agreement.
shipment. Spare parts may be new or original units under the conditions set forth in subsection D below.
materials for a period of twelve (12) months from the date of shipment, unless otherwise provided by Seller in writing, provided the Product remains unmodified and is operated under normal and proper conditions. Warranty provisions and durations on software, integrated installed systems, Product modified or designed to meet specific customer specifications ("Custom Products"), remanufactured products, and reconditioned or upgraded products, shall be as provided in the applicable Product specification in effect at the time of purchase or in the accompanying software license.

Warranty

European Patent 367,299; 414,281; 367,300; 367,298; UK 2,072,832; France 81/03938; Italy 1,138,713rev. 07/04

Invention No. 55,358; 62,539; 69,060; 69,187 (Taiwan); No. 1,601,796; 1,907,875; 1,955,269 (Japan);

Installation Instructions

The AP 300 Access Port mounts either on a wall with wide-shoulder screws or on a suspended ceiling T-bar. This unit is not designed for mounting on a desk.

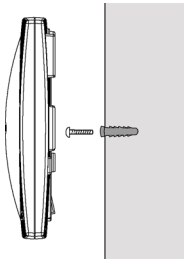
To prepare for installation, perform the following steps:

1. Match the model number on the purchase order with the model numbers in the packing list and on the case of the device shipped.
2. Verify that the contents of the box include the intended AP 300 Access Port and mounting hardware:

Item	Notes
WSAP-5110-100-WW	802.11a/b/g configuration. Mounting Hardware: Two wide-shoulder Phillips pan head self-tapping screws.
3.	Review site survey and network analysis reports to determine the location and mounting position for the AP 300 Access Port.
4.	Connect a CAT-5 cable to a compatible 802.3af power source and run the cable to the installation site. Ensure that there is sufficient slack on the cable to perform the installation steps.

Wall Mount

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



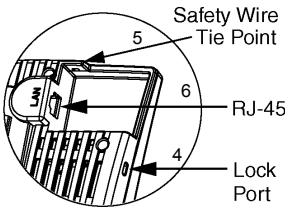
(7)

Wall Mount Hardware

- Two wide-shoulder Phillips pan head self-tapping screws
- Two wall anchors
- Safety wire (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 0.875in. Type A or AB Self-Tapping Screw, or (ANSI Standard Metric) M3.5 X 0.6 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, move the edge to the midline of the mounting area and mark points on the midline for the screws.
3. At each point, drill a hole in the wall, insert an anchor, screw into the anchor the wall mounting screw and stop when there is 1mm between the screw head and the wall.
Note: When pre-drilling a hole the recommended hole size is 2.8mm (0.11in.) if the screws are going directly into the wall and 6mm (0.23in.) if the provided wall anchors are being used.
4. If required, loop a safety wire—with a diameter of at least .101cm (.04in.) but no more than .158cm (.0625in.)—around the tie point and secure the loop.
5. If required, install and attach a security cable to the unit's lock port.
6. Attach the Ethernet cable to the unit and to a switch with an 802.3af-compatible power source.



(8)

9. Verify the unit has power by observing that the LEDs are lit or flashing.

Suspended Ceiling T-Bar Mount

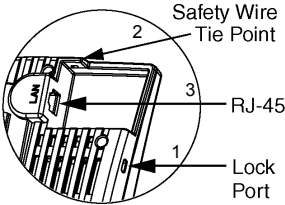
Ceiling mount requires holding the AP 300 Access Port up against a T-bar of a suspended ceiling grid and twisting the case onto the T-bar.

Ceiling Mount Hardware

- Safety wire (recommended) and security cable (optional)

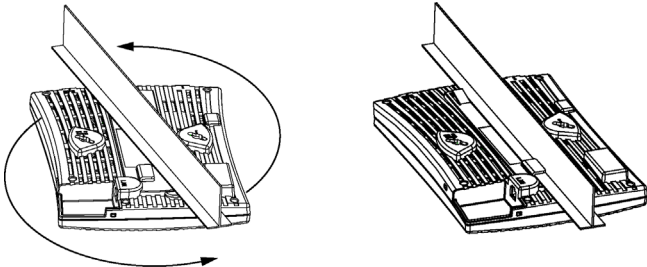
Ceiling Mount Procedure

1. If required, loop a safety wire—with a diameter of at least .101cm (.04in.) but no more than .158cm (.0625in.)—through the tie post and secure the loop.
2. If required, install and attach a security cable to the lock port.
3. Plug the Ethernet cable into the the unit and to a switch with an 802.3af-compatible power source.



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8. Rotate the case 45 degrees counter-clockwise. The clips click as they fasten to the T-bar.



9. Verify the unit has power by observing the LEDs.

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Regulatory Information

All Symbol devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Any changes or modifications to Symbol Technologies 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 could cause damage and may violate regulations.

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

Country Approvals

Regulatory markings are applied to the device signifying the radio (s) are approved for use in the following countries: United States, Canada, Australia, Japan & Europe 1,2. Please refer to the Symbol Declaration of Conformity (DoC) for details of other country markings. This is available at <http://www2.symbol.com/doc/>.

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

Note 2: The use of 5GHz RLAN's has varying restrictions of use; please refer to the Symbol Declaration of Conformity (DoC) for details.

Operation of the device without regulatory approval is illegal.

Frequency of Operation

The use on UNII (Unlicensed National Information Infrastructure) Band 1 5150-5250 MHz is restricted to indoor use only.

FCC/EU RF Exposure Guidelines



The device complies with Internationally recognised standards covering Specific Absorption Rate (SAR) related to human exposure to electromagnetic fields from radio devices. It is advisable to use the device only in the normal operating position.

Remote and Standalone Antenna Configurations

To comply with FCC RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop or similar configurations must operate with a minimum separation distance of 20 cm from all persons.

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Power Supply

This device is powered from a 802.3af compliant power source which is UL approved.

Radio Frequency Interference Requirements



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

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 & 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.

Label Marking: The Term "IC:" before the radio certification only signifies that Industry Canada technical specifications were met.

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CE Marking and European Economic Area (EEA)

The use of 2.4GHz 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, outside usage is restricted to 2.4-2.454 GHz
- Belgium, outside usage is restricted to 2.460-2.4835 GHz
- Italy requires a user license for outside usage.

The use of 5GHz RLAN's has varying restrictions for use within the EEA; please refer to the Symbol Declaration of Conformity (DoC) for details at <http://www2.symbol.com/doc/>

Statement of Compliance

Symbol Technologies, Inc., hereby, declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A Declaration of Conformity may be obtained from <http://www2.symbol.com/doc/>

Other Countries

Mexico - Restrict Frequency Range to: 2.450 - 2.4835 GHz.

Sri Lanka - Restrict Frequency Range to: 2.400 – 2.430 GHz.

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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 problem, question or support issue involving Symbol products.

If the Symbol Customer Support specialists cannot solve a problem, access to all technical disciplines within Symbol becomes available for further assistance and support. Symbol Customer Support responds to calls by 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

North American Contacts

Inside North America, contact Symbol at:
Symbol Technologies, Inc.
One Symbol Plaza
Holtsville, New York 11742-1300

1-631-738-2400/1-800-SCAN 234
Fax: 1-631-738-5990

International Contacts

Outside North America, contact Symbol at:
Symbol Technologies, Inc.
Symbol Place
Winnersh Triangle, Berkshire, RG41 5TP
United Kingdom

0800-328-2424 (Inside UK) /+44 118 945 7529 (Outside UK)

For warranty and service information, contact the Symbol Support Center: telephone 1-631-738-6213 or 1-800-653-5350; fax: (631) 563-5410; or E-mail: support@symbol.com.

Web Support Sites and Additional Information

MySymbolCare	http://www.symbol.com/services/msc/
Symbol Services Homepage	http://symbol.com/services/
Symbol Software Updates	http://symbol.com/services/downloads/
Symbol Developer Program	http://software.symbol.com/devzone/
Symbol Knowledge Base	http://kb.symbol.com/register.asp

Obtain additional information by contacting Symbol at:

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- <http://www.symbol.com/>

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