

AT-AP500

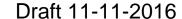
Cloud-Managed Enterprise-class Wireless Access Point with IEEE802. I Ia/b/g/n/ac Dual Radio



Installation Guide

the solution: the network

613-002286 Rev. B



Copyright © 2016 Allied Telesis, Inc.

All rights reserved. No part of this publication may be reproduced without prior written permission from Allied Telesis, Inc. Allied Telesis and the Allied Telesis logo are trademarks of Allied Telesis, Incorporated. All other product names, company names, logos or other designations mentioned herein are trademarks or registered trademarks of their respective owners.

Allied Telesis, Inc. reserves the right to make changes in specifications and other information contained in this document without prior written notice. The information provided herein is subject to change without notice. In no event shall Allied Telesis, Inc. be liable for any incidental, special, indirect, or consequential damages whatsoever, including but not limited to lost profits, arising out of or related to this manual or the information contained herein, even if Allied Telesis, Inc. has been advised of, known, or should have known, the possibility of such damages.

Contents

List of Figures	3
List of Tables	
Preface	7
Safety Symbols Used in this Document	
Contacting Allied Telesis	
· ·	
Chapter 1: Overview	
Features	
Rear Panel Components	
LAN Port	
Power over Ethernet	
Connector Type	
Speed	
Duplex Mode	
Maximum Distance	
Cable Requirements	
Automatic MDIX Detection	
Port Pinouts	
LEDs	
Reset Button	18
Chapter 2: Installing the Access Point	19
Reviewing Safety Precautions	
Unpacking the AT-AP500 Access Point	
Installing the Access Point on a Wall or Ceiling	23
Guidelines	23
Mounting the Base Plate to the Wall or Ceiling	24
Attaching the Mounting Bracket to the Access Point	25
Attaching the Access Point to the Base Plate	26
Cabling the Access Point	
Kensington Lock	
Starting the Initial Management Session on the Access Point	
Requirements	
Starting the Management Session	3′
Appendix A: Technical Specifications	31
Physical Specifications	
Environmental Specifications	
Power Specifications	
LAN Port	
Appendix B: Regulatory & Compliance Statements	
Safety and Electromagnetic Compatibility Certifications	
Federal Communication Commission Interference Statement	
Industry Canada Statement	41
HURODA — HULLIACISTSTION OF CONTORMITY	Λ'

List of Figures

Figure 1: Rear Panel Components	. 13
Figure 2: AT-TQ0091 AC/DC Power Adapter	. 22
Figure 3: Ventilation Slots	
Figure 4: Base Plate Hole Dimensions	. 24
Figure 5: Mounting Base Plate	. 24
Figure 6: Bottom of Access Point	. 25
Figure 7: Locking Bracket to Access Point	
Figure 8: Attaching the Mounting-Bracket Screw	. 26
Figure 9: Attaching Access Point to Base Plate	
Figure 10: Connecting the Network Cable	
Figure 11: Connecting the Power Cable from the AT-TQ0091 AC/DC Adapter	
Figure 12: Removing an AC Plug from the AT-TQ0091 AC/DC Power Adapter	
Figure 13: Installing an AC Plug on the AT-TQ0091 AC/DC Power Adapter	
Figure 14: Kensington Lock	
Figure 15: Pin Layout for the RJ45 Connector on the LAN Port	

List of Tables

Table 1. Components on the Rear Panel	
Table 2. Twisted Pair Cable for the LAN Port	16
Table 3. LEDs on the AT-AP500 Access Point	
Table 4. AT-AP500 Physical Specifications	33
Table 5. Environmental Specifications	
Table 6. AT-AP500 Maximum Power Consumption	
Table 7. AT-TQ0091 Power Adapter	
Table 8. LAN Port Specifications	
Table 9. MDI Pin Signals (10Base-T or 100Base-TX)	
Table 10. MDI-X Pin Signals (10Base-T or 100Base-TX)	
Table 11. 1000Base-T Connector Pinouts	
Table 12. Safety and Electromagnetic Compatibility Certificates	

List of Tables

Preface

This guide contains the hardware installation instructions for the AT-AP500 Wireless Access Point. This preface contains the following sections:

- □ "Safety Symbols Used in this Document" on page 8
- □ "Contacting Allied Telesis" on page 9

Safety Symbols Used in this Document

This document uses the following conventions.

Note

Notes provide additional information.



Caution

Cautions inform you that performing or omitting a specific action may result in equipment damage or loss of data.



Warning

Warnings inform you that performing or omitting a specific action may result in bodily injury.

Contacting Allied Telesis

If you need assistance with this product, you may contact Allied Telesis technical support by going to the Support & Services section of the Allied Telesis web site at **www.alliedtelesis.com/support**. You can find links for the following services on this page:

- 24/7 Online Support Enter our interactive support center to search for answers to your product questions in our knowledge database, check support tickets, learn about Return Merchandise Authorizations (RMAs), and contact Allied Telesis technical experts.
- □ USA and EMEA phone support Select the phone number that best fits your location and customer type.
- ☐ Hardware warranty information Learn about Allied Telesis warranties and register your product online.
- ☐ Replacement Services Submit an RMA request via our interactive support center.
- Documentation View the most recent installation and user guides, software release notes, white papers, and data sheets for your products.
- □ Software Downloads Download the latest software releases for your managed products.

For sales or corporate information, go to www.alliedtelesis.com/purchase.

Preface

Chapter 1

Overview

This chapter describes the hardware components of the AT-AP500 Wireless Access Point. This chapter contains the following sections:

- □ "Features" on page 12
- ☐ "Rear Panel Components" on page 13
- ☐ "LAN Port" on page 15
- □ "LEDs" on page 17
- ☐ "Reset Button" on page 18

Features

The main features of the product are listed here:

Dual concurrent radio: 2.4 GHz and 5 GHz
IEEE 802.11a/b/g/n/ac
MIMO with internal omni antennas
— 2.4 GHz radio: 3x3:3ss
— 5 GHz radio: 4x4:4ss
Maximum capacity 2.4 GHz: 450 Mbps
Maximum capacity 5 GHz: 2,200 Mbps
Rogue access point detection
Multiple SSIDs
One 10/100/1000Base-T Ethernet port with Auto-Negotiation, auto MDI/MDIX, and IEEE 802.3at Power over Ethernet (PoE+)
IEEE 802.3 (10Base-T), IEEE 802.3u (100Base-TX), and IEEE 802.3ab (1000Base-T) compliance on the Ethernet port
MAC address filtering for wireless access security
Broadcast and multicast rate limiting
Virtual access points for multiple broadcast domains
DHCP client
WPA-Personal and WPA-Enterprise with WPA, WPA2, TKIP, and CCMP (AES) authentication and encryption
Static WEP encryption
Cloud-managed from AlliedView™ Cloud
Quality of Service
Wall or ceiling installation

Rear Panel Components

The rear panel components of the AT-AP500 Access Point are illustrated in Figure 1.

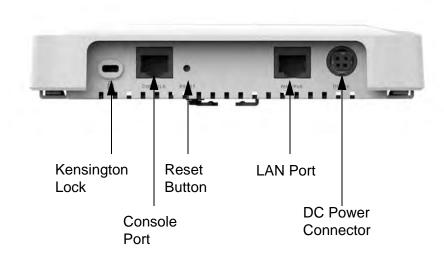


Figure 1. Rear Panel Components

The components are listed in Table 1.

Table 1. Components on the Rear Panel

Field	Description
Kensington Lock	Lock to secure the access point. For information, refer to "Kensington Lock" on page 30.
Console Port	The Console port is for manufacturing purposes only.
Reset Button	Reboots the unit. For information, refer to "Reset Button" on page 18.
LAN Port	The LAN port connects the access point to your wired network. It supports PoE+. If you connect the port to an Ethernet switch that supports PoE+, you do not have to use the AC/DC adapter to power the device. For information, refer to "LAN Port" on page 15.

Table 1. Components on the Rear Panel (Continued)

Field	Description
DC Power Connector	This connector is for the AT-TQ0091 Power Adapter. The access point can be powered with PoE+ on the LAN port or the power adapter. The AT-TQ0091 Power Adapter does not come with the access point. It must be ordered separately from Allied Telesis.

LAN Port

The LAN port is used to connect the device to your Local Area Network (LAN), typically through an Ethernet switch.

Power over Ethernet

The AT-AP500 Access Point supports Power over Ethernet (PoE+) on the LAN port. The unit is a PoE+ class 4 powered device with a maximum power consumption of 17.2 watts. When the port is connected to a PoE+ Ethernet switch, the unit receives its power over the network cable that carries the network traffic. If you use the PoE+ feature, you do not need to use the AC/DC power adapter that has to be purchased separately.

Connector Type

The LAN port has an eight-pin RJ45 connector. The port uses four pins at 10 or 100 Mbps and all eight pins at 1000 Mbps. The pin assignments are listed in "LAN Port" on page 35.

Speed

The LAN port can operate at 10, 100, or 1000 Mbps. The speed is set automatically with Auto-Negotiation. You cannot disable Auto-Negotiation on the port.

Note

The LAN port should be connected to a network device that also adjusts its speed with Auto-Negotiation. If the network device does not support Auto-Negotiation, the LAN port operates at 10 Mbps, which may reduce network performance.

Duplex Mode

The LAN port can operate in either half- or full-duplex mode at 10 or 100 Mbps, and full-duplex mode at 1000 Mbps. The port is IEEE 802.3u-compliant and uses Auto-Negotiation to set the duplex mode. (You cannot disable Auto-Negotiation on the port.)

Note

The LAN port should be connected to a network device that also sets its duplex mode with Auto-Negotiation. If the network device does not support Auto-Negotiation, the LAN port operates at half-duplex mode. This may result in a duplex mode mismatch if the network device is operating at full-duplex.

Maximum Distance

The LAN port has a maximum operating distance of 100 meters (328 feet).

Cable Requirements

The cable requirements for the LAN port are listed in Table 2 on page 16.

Table 2. Twisted Pair Cable for the LAN Port

	10Mbps		100Mbps		1000Mbps	
Cable Type	Non- PoE+	PoE+	Non- PoE+	PoE+	Non- PoE+	PoE+
Standard TIA/EIA 568-B-compliant Category 3 shielded or unshielded cabling with 100 ohm impedance and 16 MHz frequency.	Yes	No	No	No	No	No
Standard TIA/EIA 568- A-compliant Category 5 shielded or unshielded cabling with 100 ohm impedance and 100 MHz frequency.	Yes	Yes	Yes	Yes	No	No
Standard TIA/EIA 568-B-compliant Enhanced Category 5 (Cat 5e) shielded or unshielded cabling with 100 ohm impedance and 100 MHz frequency.	Yes	Yes	Yes	Yes	Yes	Yes
Standard TIA/EIA 568- B-compliant Category 6 or 6a shielded cabling.	Yes	Yes	Yes	Yes	Yes	Yes

Automatic MDIX Detection

The 10/100/1000 Mbps twisted-pair port is IEEE 802.3ab compliant and features automatic MDIX detection when operating at 10 or 100 Mbps. (Automatic MDIX detection does not apply to 1000 Mbps.) This feature automatically configures the port to MDI or MDI-X, depending on the wiring configuration of the port on the Ethernet switch.

You may not disable automatic MDIX detection. For automatic MDIX detection to work properly, it must also be present on the Ethernet switch. The LAN port defaults to MDIX if it is connected to a network device that does not support automatic MDIX detection.

Port Pinouts

Refer to Table 9 on page 35 for the port pinouts of the LAN port when it is operating at 10 or 100 Mbps in the MDI configuration and Table 10 on page 36 for the MDI-X configuration. Refer to Table 11 on page 36 for the port pinouts when the port is operating at 1000 Mbps.

LEDs

The LEDs on the AT-AP500 Access Point are described in Table 3.

Table 3. LEDs on the AT-AP500 Access Point

LED	State	Description
PWR	Solid Green	The unit is receiving DC power that is within the normal operating range.
	Off	The power supply is not receiving power from either the AC/DC power adapter or a PoE+ Ethernet switch.
SYS	Solid Amber	The access point is loading its firmware or there is a system fault.
	Off	The unit is operating normally.
LAN	Solid Green	The Ethernet port is operating at 1000 Mbps.
	Flashing Green	The Ethernet port is operating at 1000 Mbps with link activity.
	Solid Amber	The Ethernet port is operating at 10/100 Mbps.
	Flashing Amber	The Ethernet port is operating at 10/100 Mbps with link activity.
2.4GHz	Solid Green	The 2.4GHz radio is sending and receiving radio waves.
5GHz	Solid Green	The 5GHz radio is sending and receiving radio waves.

Reset Button

The Reset button on the rear panel is used to reboot the unit.

The Reset button is recessed to prevent it from being accidentally pressed. To press the button, use a pointed object, such as the end of a straightened paper clip.

Chapter 2

Installing the Access Point

This chapter describes how to install the AT-AP500 Wireless Access Point. This chapter contains the following sections:

- "Reviewing Safety Precautions" on page 20
- "Unpacking the AT-AP500 Access Point" on page 22
- □ "Installing the Access Point on a Wall or Ceiling" on page 23
- ☐ "Kensington Lock" on page 30
- □ "Starting the Initial Management Session on the Access Point" on page 31

Reviewing Safety Precautions

Please review the following safety precautions before you begin to install the access point.

Note

The & indicates that a translation of the safety statement is available in a PDF document titled *Translated Safety Statements* on the Allied Telesis website at **www.alliedtelesis.com/support**.



Warning

To prevent electric shock, do not remove the cover. No user-serviceable parts inside. This unit contains hazardous voltages and should only be opened by a trained and qualified technician. To avoid the possibility of electric shock, disconnect electric power to the product before connecting or disconnecting the LAN cables. & E1



Warning

Do not work on equipment or cables during periods of lightning activity. $\mathop{\mathscr L}$ E2



Warning

Power cord is used as a disconnection device. To de-energize equipment, disconnect the power cord. & E3

Note

Pluggable Equipment. The socket outlet shall be installed near the equipment and shall be easily accessible. & E5



Caution

Air vents must not be blocked and must have free access to the room ambient air for cooling. & E6



Warning

Operating Temperature. This product is designed for a maximum ambient temperature of 40° C $_{ex}$ E7.



Warning

To reduce the risk of electric shock, the PoE port on this product must not connect to cabling that is routed outside the building where this device is located. & E40



Caution

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. & E80



Warning

This equipment is intended for indoor use only. & E95

Note

All Countries: Install product in accordance with local and National Electrical Codes. & E8

Note

This product is not approved for use in a computer room as defined in the Standard for Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.

Note

If you are not using PoE to power to unit, use only an approved AC/DC adapter.

Note

You should verify that your PoE network adheres to the standards of a separated extra-low voltage (SELV) circuit before using the PoE feature on the wireless access point.

Unpacking the AT-AP500 Access Point

As you unpack the access point, check the shipping container for the components the following items:

- ☐ One AT-AP500 Wireless Access Point
- ☐ One AT-AP500 Wireless Access Point Quick Installation Guide
- One mounting-bracket screw
- ☐ One bracket and one base plate for wall or ceiling mounting

If any item is missing or damaged, contact your Allied Telesis sales representative for assistance.

If you are not using the PoE feature on the LAN port of the access point to power the device, you need to separately order the AT-TQ0091 AC/DC Power Adapter. The adapter comes with four regional AC plugs. (One of the AC plugs comes pre-installed on the adapter.) Refer to Figure 2.



Figure 2. AT-TQ0091 AC/DC Power Adapter

Go to "Installing the Access Point on a Wall or Ceiling" on page 23.

Installing the Access Point on a Wall or Ceiling

This procedure contains the following sections.

- □ "Guidelines"
- "Mounting the Base Plate to the Wall or Ceiling" on page 24
- "Attaching the Mounting Bracket to the Access Point" on page 25
- □ "Attaching the Access Point to the Base Plate" on page 26
- "Cabling the Access Point" on page 27

Guidelines

Please review the following guidelines before installing the access point on a wall or ceiling:

The selected location must not block the ventilation slots around the base of the unit. Refer to Figure 3.



Figure 3. Ventilation Slots

- ☐ The wall or ceiling mounting surface must be of proper material to accommodate the self-tapping screws, such as wood strong enough to support the weight of the equipment and cables.

 Otherwise, you must provide anchors to fit the mounting surface.
- One mounting-bracket screw is provided for attaching the mounting bracket to the unit. You must provide the four selftapping screws that secure the base plate to the wall or ceiling.
- ☐ The location must have an AC power source if you are using the AT-TQ0091 Power Adapter.

Mounting the Base Plate to the Wall or Ceiling

To mount the base plate to the wall or ceiling, perform the following:

1. Using the base plate as a template, mark the four holes for mounting the base plate to the wall or ceiling. See Figure 4 for hole dimensions.

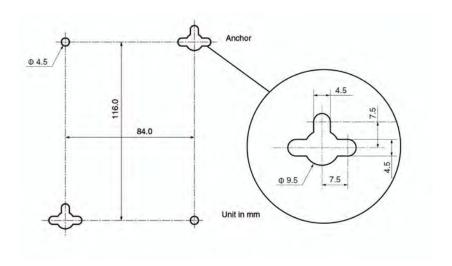


Figure 4. Base Plate Hole Dimensions

- 2. Drill the holes for the four self-tapping screws, and if applicable, two wall anchors.
- 3. If you are not installing wall anchors, skip to Step 4. If so, install the wall anchors.
- 4. Mount the base plate to the wall or ceiling using the self-tapping screws, as shown in Figure 5.

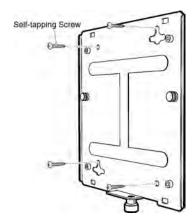


Figure 5. Mounting Base Plate

Attaching the Mounting Bracket to the Access Point

To attach the mounting bracket to the access point, perform the following:

- 1. Place the access point upside down on a flat surface.
- 2. Place the bracket against the bottom of the access point and use the bracket to push downward on the stopper nub (see Figure 6).

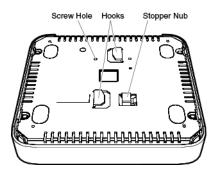


Figure 6. Bottom of Access Point

3. Turn the bracket in the direction of the arrows shown in Figure 7 until the two hooks hold the bracket: The stopper nub pops up, and the bracket locks in place.

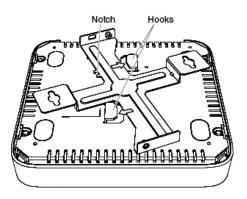


Figure 7. Locking Bracket to Access Point

4. Attach the mounting-bracket screw through the notch in the mounting bracket to the access point, as shown in Figure 8 on page 26: The bracket is fastened to the access point.

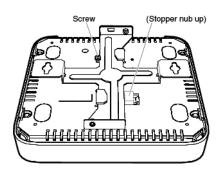


Figure 8. Attaching the Mounting-Bracket Screw

Attaching the Access Point to the Base Plate

To attach the access point and mounting bracket to the base plate on the wall or ceiling, perform the following:

- 1. Have someone hold the bottom of the access point next to the base plate attached to the wall or ceiling.
- 2. Insert the two base-plate pins into the circles of the keyhole slots, as shown in Figure 9.

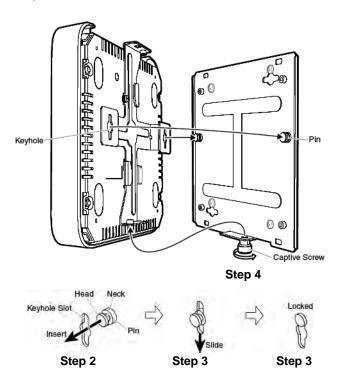


Figure 9. Attaching Access Point to Base Plate

3. Slide the access point downward to lock the necks of the base-plate pins in the slots, as shown in Figure 9.

4. Fasten the access point to the base plate by turning the base-plate captive screw clockwise using a Phillips-head screwdriver, as shown in Figure 9 on page 26.

Cabling the Access Point

To install cabling on the access point, perform the following:

 Connect a network cable to the LAN port (labeled WAN/PoE) on the rear panel of the access point. Refer to Figure 10. The specifications of the cable are listed in Table 2 on page 16.



Figure 10. Connecting the Network Cable

- 2. If you have not already done so, connect the other end of the network cable to a port on an Ethernet switch.
- 3. Do one of the following:
 - ☐ If the access point is to be powered with the AT-TQ0091 AC/DC Power Adapter, continue with this procedure to attach the power adapter.
 - ☐ If the access point is to be powered with the PoE feature on the LAN Port, the installation procedure is complete. Go to "Kensington Lock" on page 30 or "Starting the Initial Management Session on the Access Point" on page 31.
- 4. Connect the DC power cable from the AT-TQ0091 AC/DC Power Adapter to the DC 12V connector on the rear panel of the access point. Refer to Figure 11 on page 28.



Figure 11. Connecting the Power Cable from the AT-TQ0091 AC/DC Adapter

5. Check the AC plug on the AC/DC Power Adapter to see if it is the correct plug for your region. If it is not the correct plug, remove it by pushing down on the release tab and sliding it from the slot on the adapter. Refer to Figure 12.

Release Tab



Figure 12. Removing an AC Plug from the AT-TQ0091 AC/DC Power Adapter

6. Slide the correct AC plug for your region into the slot on the adapter until it clicks into place. Refer to Figure 13.



Figure 13. Installing an AC Plug on the AT-TQ0091 AC/DC Power Adapter

7. Connect the AC plug on the power cord to an appropriate AC power source. Refer to Table 7 on page 34 for the power specifications of the power adapter.

After installing the access point on a wall or ceiling, go to "Kensington Lock" on page 30 or "Starting the Initial Management Session on the Access Point" on page 31.

Kensington Lock

A Kensington lock can be used to secure the device. The lock is located on the rear panel (see Figure 14.)

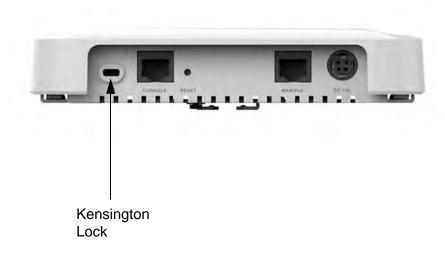


Figure 14. Kensington Lock

Starting the Initial Management Session on the Access Point

This procedure contains the following sections.

- □ "Requirements"
- "Starting the Management Session"

Requirements

You must have the following to initiate a management session on the access point:

□ Network with a DHCP server and a route for the access point to the Internet.

When you power on the access point for the first time, it will obtain an IP address from the DHCP server, and then it must be able to access the Internet to register itself with the AlliedView Cloud service.

☐ Serial number for the access point.

Starting the Management Session

To start the initial management session on the access point, perform the following.

 Create an AlliedView Cloud account at avcloud.alliedtelesis.com for the management of the access points. Refer to the AlliedView Cloud User's Guide.

Note

This account will share the login credentials with the Allied Telesis Support portal account.

- 2. Add one or more access points to the account by entering the access point name and serial number. Refer to the *AlliedView Cloud User's Guide*.
- 3. If not done already, power on the access point: the access point automatically registers with the AlliedView Cloud once a name and serial number is assigned, and the unit is powered up.
- 4. Refer to the *AlliedView Cloud User's Guide* to add the access point to the network and configure the access point.

Draft 11-11-2016

Chapter 2: Installing the Access Point

Appendix A:

Technical Specifications

This appendix contains the following sections:

- □ "Physical Specifications"
- ☐ "Environmental Specifications"
- □ "Power Specifications" on page 34
- ☐ "LAN Port" on page 35

Physical Specifications

Table 4. AT-AP500 Physical Specifications

Dimensions (W x D x H)	170.0 mm x 170.0 mm x 35.0 mm (6.7 in. x 6.7 in. x 1.4 in.)
Weight	0.47 kg (1 lb.)

Environmental Specifications

Table 5. Environmental Specifications

Operating Temperature of the Access Point When Using PoE	0° C to 40° C (32° F to 104° F)
Operating Temperature of the Access Point When Using the AC/DC Adapter	0° C to 40° C (32° F to 104° F)
Storage Temperature	-20° C to 60° C (-4° F to 140° F)
Operating Humidity	5% to 80% non-condensing
Storage Humidity	5% to 95% non-condensing

Power Specifications

Table 6. AT-AP500 Maximum Power Consumption

AT-AP500	17.2 watts
----------	------------

Table 7. AT-TQ0091 Power Adapter

Input Range	100~240 Vac
Input Frequency	47-63 Hz
Input Power Consumption (no load)	<0.3W max.
Output Voltage	+12 VDC
Output Current	2A max.

LAN Port

Table 8. LAN Port Specifications

Connector	RJ45
Standards	IEEE 802.3 (10Base-T) IEEE 802.3u (100Base-TX) IEEE 802.3ab (1000Base-T)
PoE standard	IEEE 802.3at (class 4)

Figure 15 illustrates the pin layout of the LAN port.

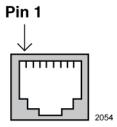


Figure 15. Pin Layout for the RJ45 Connector on the LAN Port

Table 9 lists the pin signals when the port is operating in the MDI configuration at 10 or 100 Mbps.

Table 9. MDI Pin Signals (10Base-T or 100Base-TX)

Pin	Signal
1	TX+
2	TX-
3	RX+
6	RX-

Table 10 lists the pin signals for the MDI-X configuration at 10 or 100 Mbps.

Table 10. MDI-X Pin Signals (10Base-T or 100Base-TX)

Pin	Signal
1	RX+
2	RX-
3	TX+
6	TX-

Table 11 lists the pin signals when the LAN port is operating at 1000 Mbps.

Table 11. 1000Base-T Connector Pinouts

Pin	Pair	Signal
1	1	TX and RX
2	1	TX and RX-
3	2	TX and RX+
4	3	TX and RX+
5	3	TX and RX-
6	2	TX and RX-
7	4	TX and RX+
8	4	TX and RX-

Appendix B:

Regulatory & Compliance Statements

This appendix contains the following regulatory statements:

- "Safety and Electromagnetic Compatibility Certifications" on page 38
- □ "Federal Communication Commission Interference Statement" on page 39
- "Industry Canada Statement" on page 41
- □ "Europe EU Declaration of Conformity" on page 43

Safety and Electromagnetic Compatibility Certifications

Table 12. Safety and Electromagnetic Compatibility Certificates

Environmental Compliance	RoHS WEEE
Compliance Mark	CE FCC IC RCM TUV-T UL/cUL Wi-Fi Certified
Electromagnetic Compatibility (EMC)	AS/NZS CISPR 22, Class B CISPR 22, Class B EN 301 489-1 EN 301 489-17 EN 55022, Class B EN 55024 EN 60601-1-2 (Medical Device) EN 61000-3-2, Class A EN 61000-3-3 FCC 47 CFR Part 15, Subpart B, Class B ICES-003 Issue 6, Class B
Radio Equipment	AS/NZS 2772.2 AS/NZS 4268 EN 300 328 EN 301 893 EN 62311 FCC 47 CFR Part 15, Subpart C FCC 47 CFR Part 15, Subpart E FCC OET KDB 447498 D03 (OET Bulletin No.65, Supp.C) FCC 47 Part 2 IEEE C95.1 RSS-102, Issue No. 5 RSS-247, Issue No. 1 RSS-Gen, Issue No. 4
Safety	AS/NZS 60950.1 CAN/CSA C22.2 No. 60950-1 EN 50385 EN 60950-1 IEC 60950-1 UL 2043 ¹ UL 60950-1

^{1.} Suitable for use in environmental air space in accordance with Section 300.22C of the National Electrical Code.

Federal Communication Commission Interference Statement

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.

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 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.



Caution

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. & E80



Caution

Avertissement de la FCC: Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser cet équipement. & E80

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For operation within $5.15 \sim 5.25 \, \text{GHz} / 5.47 \sim 5.725 \, \text{GHz}$ frequency range, it is restricted to indoor environment. The band from $5600-5650 \, \text{MHz}$ will be enabled by the software during the manufacturing and cannot be changed by the end user. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 26cm between the radiator & your body.

Note

The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Industry Canada Statement

This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution:

- (i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit;
- (iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate; and
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5.26-5.32GHz, 5.50-5.58GHz and 5.66-5.70GHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment:

- (i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
- (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

(iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-àd., qu'ils ont la priorité) pour les bandes 5.26-5.32GHz, 5.50-5.58GHz and 5.66-5.70GHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 26cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 26 cm de distance entre la source de rayonnement et votre corps.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- ☐ EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 Safety of Information Technology Equipment
- □ EN 50385:2002

 Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110MHz 40 GHz) General public
- □ EN 300 328 V1.9.1:2015 Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2.4GHz ISM band andusing wide band modulation techniques; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- ☐ EN 301 893 V1.8.1:2015 Broadband Radio Access Networks (BRAN); 5GHz high performance RLAN; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- ☐ EN 301 489-1 V1.9.2:2011 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
- □ EN 301 489-17 V2.2.1:2012
 Electromagnetic compatibility and Radio spectrum Matters (ERM);
 ElectroMagnetic Compatibility (EMC) standard for radio equipment;
 Part 17: Specific conditions for Broadband Data Transmission Systems

C€0560**①**

Česky [Czech]	Allied Telesis tímto prohlašuje, že tento wireless access point je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede Allied Telesis erklærer herved, at følgende udstyr wireless access point overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt Allied Telesis, dass sich das Gerät wireless access point in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab Allied Telesis seadme wireless access point vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, Allied Telesis, declares that this wireless access point is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente Allied Telesis declara que el wireless access point cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Allied Telesis ΔΗΛΩΝΕΙ ΟΤΙ wireless access point ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
Français [French]	Par la présente Allied Telesis déclare que l'appareil wireless access point est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente Allied Telesis dichiara che questo wireless access point è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo Allied Telesis deklarē, ka wireless access point atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo Allied Telesis deklaruoja, kad šis wireless access point atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart Allied Telesis dat het toestel wireless access point in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, Allied Telesis, jiddikjara li dan wireless access point jikkonforma mal- ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/ EC.
Magyar [Hungarian]	Alulírott, Allied Telesis nyilatkozom, hogy a wireless access point megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

Polski [Polish]	Niniejszym Allied Telesis oświadcza, że wireless access point jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	Allied Telesis declara que este wireless access point está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	Allied Telesis izjavlja, da je ta wireless access point v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	Allied Telesis týmto vyhlasuje, že wireless access point spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	Allied Telesis vakuuttaa täten että wireless access point tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar Allied Telesis att denna wireless access point står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Draft 11-11-2016

Appendix B: Regulatory & Compliance Statements