Fiber Backpack for H510 Quick Setup Guide

This *Quick Setup Guide* provides step-by-step instructions for setting up your Ruckus Wireless Fiber Backpack (Model: P01-0500, Ruckus PN# P01-0500-0000) to work with a Ruckus Wireless H510 access point (AP).

CAUTION! Plugging a PoE injector into the LAN port may cause damage to the device.

NOTE: Connect the H510 DC plug to this unit to supply PoE power to the H510.

NOTE: Please read these operation instructions carefully before start of operation.

This Guide in Other Languages

- 请从以下网站获得该指南的简体中文版 https://support.ruckuswireless.com.
- Vous trouverez la version française de ce guide à l'adresse suivante https://support.ruckuswireless.com.
- このガイドの日本語版は https://support.ruckuswireless.com でご覧ください。
- 이 가이드의 한국어 버전은 웹 사이트 (https://support.ruckuswireless.com) 에서 확인하시기 바랍니다.
- Veja a versão em português (Brasil) deste guia em https://support.ruckuswireless.com.
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Before You Begin

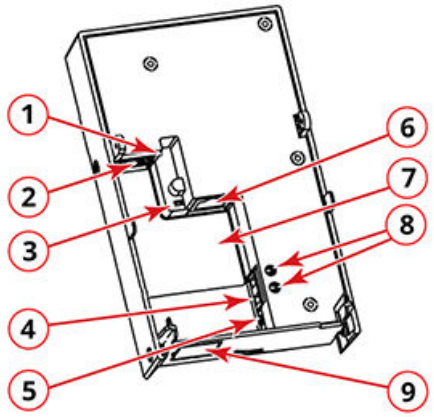
Before deploying Ruckus products, please check for the latest software and the release documentation.

- Release Notes and other user documentation are available at http://support.ruckuswireless.com/documents.
- Software upgrades are available at http://support.ruckuswireless.com/software.
- Open source information is available at http://opensource.ruckuswireless.com/open_source.

About Device

The Fiber Backpack is a bolt-on accessory that provides a cheaper alternative to fiber Optical Network Terminal (ONT) interface devices. It is an external assembly and can be installed in the field on-site, enabling fiber backhaul for any existing H510 installation.

FIGURE 1 Fiber Backpack Elements



1. Signal LED
2. Fiber/SFP port
3. Power LED
4. DC Terminal block
5. 48 V DC port
6. Ethernet PoE outlet port
7. Cutout for cable passthrough from junction box
8. Access holes for Terminal block screws
9. Punch-out tab

Package Contents

A complete Fiber Backpack installation package includes all of the following items:

- Fiber Backpack for H510
- RJ45 cable, 5-inch length
- Kit (screws and clips)
  - Two plastite screws torx flat-head # 4-20 x 0.375 L
  - Two screws torx flat-head M3 x 6mm L
  - Three self-adhesive wire retainer
- Regulatory Statement
- This Quick Setup Guide

Installing Fiber Backpack with the H510 Unit

NOTE: The Fiber Backpack must be mounted on the mounting bracket prior to the H510.

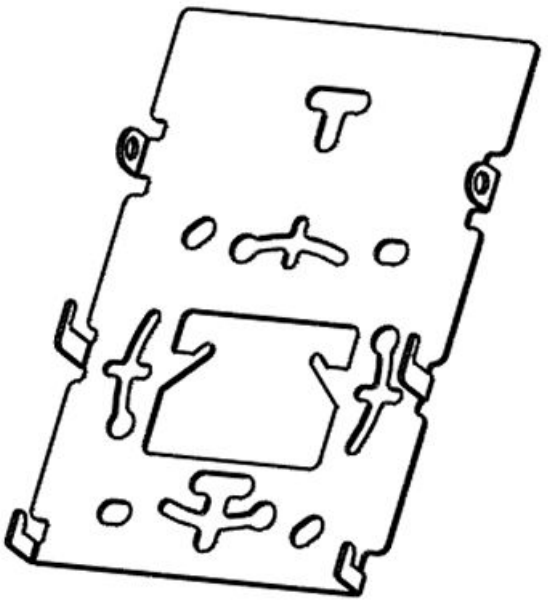
To install the Fiber Backpack on the H510, refer to the following steps:

Step 1: Attaching the Mounting Bracket to an Outlet Box

NOTE: The mounting bracket has four hooks that face up. Make sure that the hooks are facing up when attaching the mounting bracket to the wall outlet box.

1. Use either the original wall outlet box screws or the factory-supplied 1-inch Phillips pan head machine screws to attach the mounting bracket to a single-gang wall outlet box or to the wall.

FIGURE 2 Mounting Bracket



2. Pull the fiber cable and the power cable through the punchout tab opening in the bottom of the Fiber Backpack or through the hole in the center of the mounting bracket and Fiber Backpack.

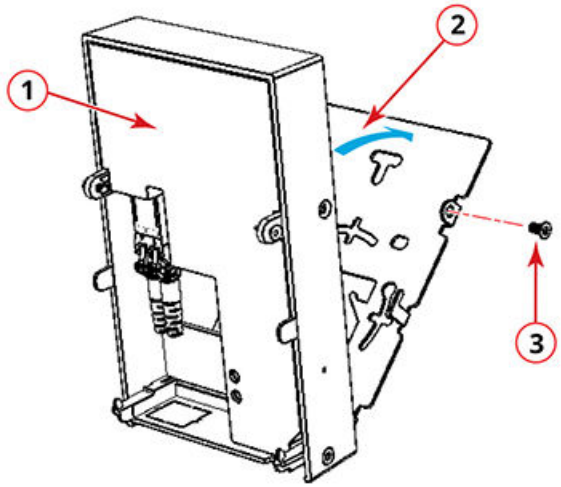
   If the fiber cable and the power cable are from the outlet box, need not pull the cable through the punchout tab opening.

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Step 2: Attaching the Fiber Backpack to the Mounting Bracket

1. Make sure that the mounting bracket is securely fastened as described in Step 1: Attaching the Mounting Bracket to an Outlet Box on page 1.
2. The mounting bracket has two lower hooks that fit into slots on the bottom of the Fiber Backpack. Rest the bottom of the Fiber Backpack on those hooks, and then tilt the Fiber Backpack until it is up against the mounting bracket as shown in the following figure.

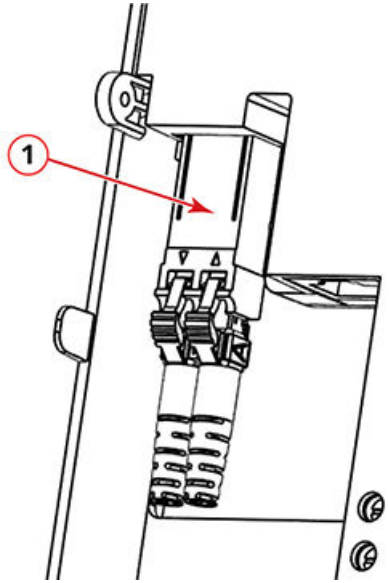
FIGURE 3 Fiber Backpack on Mounting Bracket



1. Fiber Backpack
2. Mounting bracket
3. Screw

3. Use a T10 Torx screwdriver to insert the factory-supplied Torx flat-head machine screws through the Fiber Backpack screw holes into the threaded inserts on the sides of the mounting bracket as shown in the preceding figure.
4. Insert the SFP Transceiver into the Fiber/SFP Port and connect the Fiber Cable into the SFP Transceiver as shown in the following figure.

FIGURE 4 SFP Module



1. SFP Module installed in the SFP Port

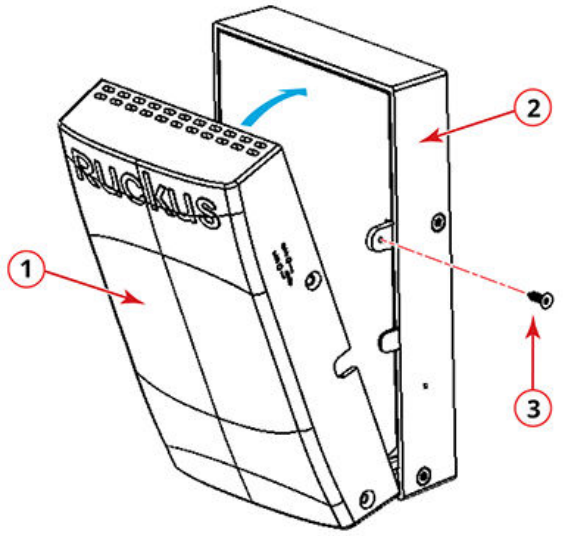
5. If you are powering the Fiber Backpack with a customer-ordered DC power adapter, ensure that the power cable is able to reach the DC port without any obstruction.
6. Using a DC adapter (sold separately), connect the Fiber Backpack 48 V DC port to a protected power source.

   Alternately, power can be supplied through a customer-provided power supply that will connect to a two-pin terminal block. The terminal block connection has surge and polarity protection to protect against inserting the wrong polarity leads into the terminal block.
7. Verify that the Power LED on the front of the enclosure is a steady green.
8. Connect one end of the Ethernet Cable to the Ethernet PoE Port of the Fiber Backpack.

Step 3: Mounting the H510 to the Fiber Backpack

1. Make sure that all the cables are securely connected as described in Step 2: Attaching the Fiber Backpack to the Mounting Bracket on page 2.
2. Connect the other end of the Ethernet cable to the PoE In Port on the rear of the H510.
3. The Fiber Backpack has two lower hooks that fit into slots on the bottom of the H510. Rest the bottom of the H510 on those hooks, and then tilt the H510 until it is up against the Fiber Backpack as shown in the following figure.

FIGURE 5 Mounting of H510 on Fiber Backpack



1. H510
2. Fiber Backpack
3. Screw

4. Insert the two pointed Torx screws from the kit into the sides of the H510 to lock the H510 to the Fiber Backpack as shown in the preceding figure.

Installing Fiber Backpack as a Standalone Unit

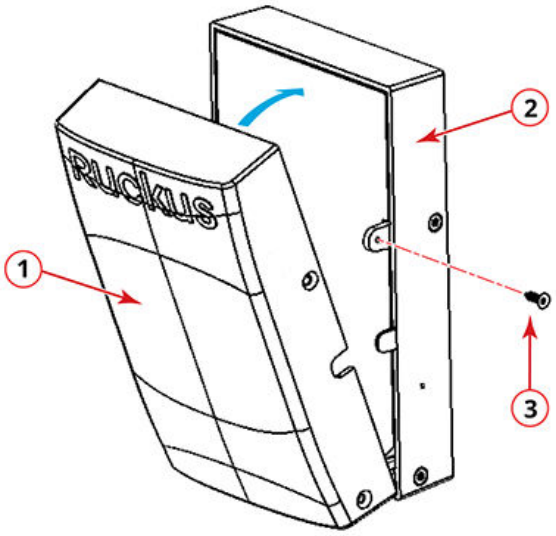
The Fiber Backpack unit requires an external cover (sold separately) that allows the Fiber Backpack to be used as a standalone product. To mount the external cover securely with the Fiber Backpack, complete the following steps:

1. To attach the mounting bracket to an outlet box, follow the steps as described in Step 1: Attaching the Mounting Bracket to an Outlet Box on page 1.
2. To attach the Fiber Backpack to the mounting bracket, follow the steps as described in Step 2: Attaching the Fiber Backpack to the Mounting Bracket on page 2.
3. Connect one end of the Ethernet Cable to the Ethernet PoE Port of the Fiber Backpack and pull the cable through the punch-out tab in the bottom of the unit.

   NOTE: For a standalone unit, a longer Ethernet cable (customer supplied) is required to attach to the H510.
4. The Fiber Backpack has two lower hooks that fit into slots on the bottom of the external cover. Rest the bottom of the external cover on those hooks, and then tilt the external cover until it is up against the Fiber Backpack as shown in the following figure.

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FIGURE 6 Standalone Fiber Backpack Unit



1. External cover
2. Fiber Backpack
3. Screw

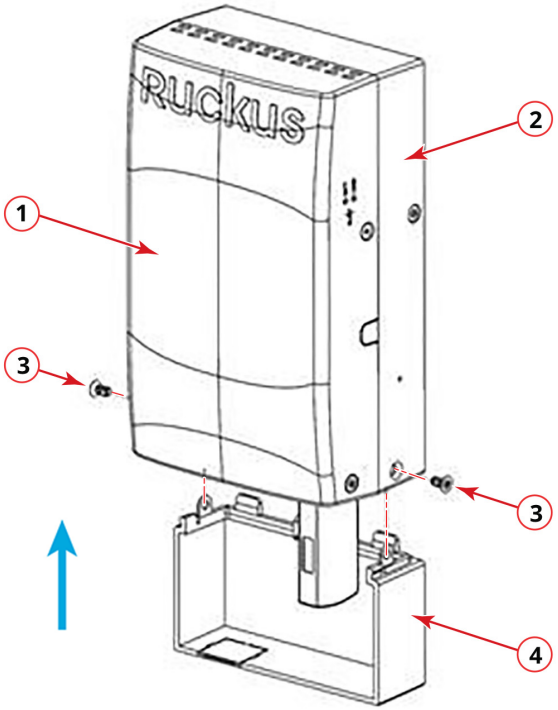
5. Insert the two pointed Torx screws from the kit into the sides of the external cover to lock the external cover to the Fiber Backpack as shown in the preceding figure.

Installing Fiber Backpack on H510 with IoT Module

1. Complete the steps as described in Installing Fiber Backpack with the H510 Unit on page 1 prior to installing the IoT module.
2. Plug the I100 IoT module securely into the USB jack on the bottom of the H510.
3. Remove the screws from Fiber Backpack and reinsert the screws to attach the cable cover, as shown in Figure 7.
4. Remove the screws from H510 and reinsert the screws to attach the IoT Cover (sold separately), as shown in Figure 8.

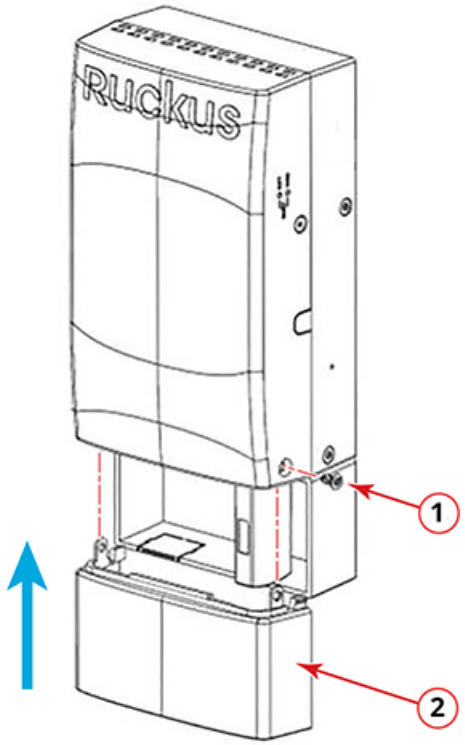
NOTE: IoT cover information available in Ruckus I100 IoT Module Quick Setup Guide.

FIGURE 7 Attaching the Cable Cover



1. H510
2. Fiber Backpack
3. Screw
4. Cable cover

FIGURE 8 Attaching the IoT Cover



1. Screw
2. IoT cover

For More Information

For information on how to configure and manage the AP, refer to the *RUCKUS Access Point User Guide*, available from http://docs.commscope.com/?docs-box.

For the product data sheet, refer to https://www.ruckusnetworks.com/products/wireless-access-points/.

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