Finishing Basic Configuration

When you finish entering basic settings:

1. To save and apply the settings, click **Save and Restart** near the top of the left sidebar. The device restarts.
2. After restart, log back into the AEP interface. On the Dashboard under **Cellular**, the PPP state displays **Link is Up**. You may have to wait for short time.

Getting Started LoRa

To get started with LoRa

1. If you are not logged in to AEP, log in to the web management interface.
2. Access LoRa Network Server Configuration by going to **Setup > LoRa Network Server** on the left sidebar.
3. Modify the following settings as needed. For advanced settings, more detailed field descriptions, and information on configuring endpoints, go to http://www.multitech.net/developer/software/lora/

Field	915 (NA, AS, AU, KR)
Enabled	Checked
Frequency Band	915
Frequency Sub Band	1 to 8
Additional Channels	NA
Name	LoRa network name (case sensitive)
Passphrase	LoRa network security passphrase (case sensitive)

Additional Information

For additional information, including how to configure LoRa devices to communicate with the MTCAP, visit http://www.multitech.net.

- Find the *Conduit AP MTCAP User Guide* for your model at https://www.multitech.com/brands/multiconnect-conduit-ap
- For help using LoRa, go to: http://www.multitech.net/developer/software/lora/
- For help using AEP, go to http://www.multitech.net/developer/software/aep/.

Mounting the MTCAP

The device ships with a mounting bracket. You will need:

- MTCAP with mounting bracket
- Screwdriver
- Drill
- Four #6 screws, with anchors (not provided)

Determining Location for the MTCAP

Follow these guidelines for best performance:

- For optimal performance, place the MTCAP at a level higher than the end devices.
- Angle the antenna so it is not parallel to the surface. It does not need to be perpendicular to the surface, but it should not be flat.

- Select a location central to all devices to be connected to this MTCAP.
- Avoid obstructions.
  Important: Thick walls and reflective surfaces, such as metal, weaken the signal between the MTCAP and other devices.
- We recommend conducting a site survey to test the signal strength in different locations before you mount the device.

Mounting the MTCAP

1. Determine where you want to mount the device.
2. Mark where you want the screws to go.
3. Drill holes for the screws and insert anchors.
4. Place the mounting bracket and secure it with screws.
5. Attach the device to the bracket and rotate to lock into place
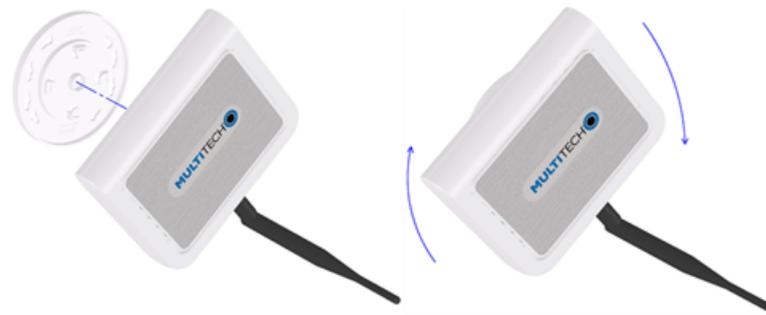
Safety and Regulatory Content

For safety and regulatory content, refer to your model's *Conduit Access Point User Guide*, which is available at www.multitech.com.

Conduit® Access Point Quick Start

Document Number: 82104300L

Copyright and Trademark

This publication may not be reproduced, in whole or in part, without the specific and express prior written permission signed by an executive officer of Multi-Tech Systems, Inc. All rights reserved. Copyright © 2019 by Multi-Tech Systems, Inc.

Multi-Tech Systems, Inc. makes no representations or warranties, whether express, implied or by estoppels, with respect to the content, information, material and recommendations herein and specifically disclaims any implied warranties of merchantability, fitness for any particular purpose and non-infringement. Multi-Tech Systems, Inc. reserves the right to revise this publication without obligation to notify any person or organization of such revisions or changes.

MultiTech, Conduit, and the MultiTech logo are registered trademarks of Multi-Tech Systems, Inc. All other brand and product names are trademarks or registered trademarks of their respective companies.

Conduit® AP
MTCAP for AEP Quick Start

Welcome

Conduit AP (MTCAP) connects thousands of IoT assets to the cloud using the LoRaWAN® protocol. It is capable of packet forwarding user data between LoRa end points and a centrally located network server.

**Note:** Check for an updated version of this document at https://www.multitech.com/brands/multiconnect-conduit-ap

Package Contents

Your device ships with the following:

1 – Conduit AP   1 – 5 Volt Power supply   1 - Antenna

1 – Quick Start   1 – RJ45 Ethernet cable

Important: Contact MultiTech Systems if a replacement 5 V power supply is needed. Using a different power supply may damage the device and voids the warranty.

Connectors and LEDs
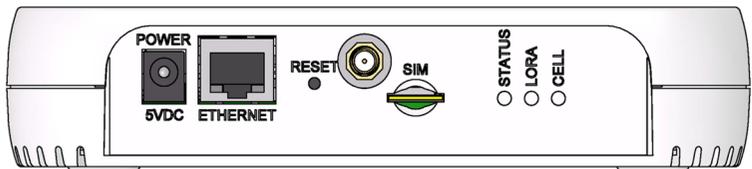
Note: Some features are available only on select models. The above image shows the model with all features.

Item	Description
Connectors	
Power	5 Volt power jack.
Ethernet	RJ45 Ethernet jack.
Reset	Reset button. Reboots device or restores factory defaults.
(No label)	SMA Connector for external LoRa antenna.

Item	Description
SIM	*Cellular models only.* SIM slot.
LEDs	
STATUS	Blinks when operating system is fully loaded.
LORA	Lights when LoRa software is active.
CELL	*Cellular models only.* Lights when there is power to the radio. Blinks when the SIM is registered with the carrier.
WIFI	Reserved for future use.
Ethernet Link	Left LED on the Ethernet connector. Blinks when data is sent or received on the Ethernet link. Steady light when there is a valid Ethernet connection.
Ethernet Speed	Right LED on the Ethernet connector. Lit when the Ethernet is linked at 100 Mbps. If not lit, the Ethernet is linked at 10 Mbps.

Installing a SIM Card

If your device has a SIM slot, you'll need a micro SIM card from your network provider.

Note: The MTCAP-LNA3 works on both Verizon and AT&T networks. The MTCAP detects the carrier based on your SIM card.

To install the SIM card:

■ With the contact side facing down, align the notched edge as shown on the following image and slide the SIM card completely into the SIM holder.

Attaching the Antenna

■ Finger-tighten the antenna to the SMA antenna connector on your device.

Cabling Your Device

1. Connect the Ethernet cable to the Ethernet port on the device and to a PC.
2. Connect the power supply to the power jack and wait 30 seconds for the device to power up.

Logging in to AEP

After connecting and powering up your device, login to AEP:

1. Open an Internet browser. In the browser's address field, enter the device's default address for the device: 192.168.2.1. The login page appears.
2. Type the default user name: **admin**.
3. Type the default password: **admin**.
4. Click **Login** to start the First Time Setup Wizard.

Setting a New Password

Note: Note: For security reasons, we recommend you change the default password.

To set a new password:

1. Click **Next** on the Welcome panel.
2. In the **Current Password** field, enter the default password, **admin**.
3. In the **New Password** field, enter a new password.
4. Enter the new password in the **Confirm Password** field.
5. Click **Next**.

Setting Time Zone, Time, and Date

To set the time zone, date, and time:

1. Type today's **Date** in the format shown or use the calendar (data picker).
2. Type the current **Time** (24-hour format).
3. Select the **Time Zone** in which the device operates.
4. Click **Next**.

Configuring PPP

Note: For models with cellular radios only.

1. To use PPP, check **Enable**. When enabled, your device functions as a cellular device.
2. To enable dial-on-demand, check **Dial-on-Demand**. This tells the device to only make a PPP connection when there is outgoing IP traffic, and it brings the PPP connection down after a given idle timeout.
3. The default **Idle timeout** is **180 seconds.** If desired, you can enter a different value.
4. Type the **APN** (Access Point Name). The APN is assigned by your wireless service provider.
5. Click **Next**.

Setting Up PPP Authentication

To setup cellular PPP authentication:

1. Select an authentication protocol **Type** used to negotiate with the remote peer: **pap, chap, or pap-chap**. The default is **None**.
2. Type the **Username** for the remote peer to use for authentication. Optional. Username is limited to 60 characters.
3. Type the **Password** for the remote peer to use for authentication. Optional. Password is limited to 60 characters.

4. Click **Next** to exit the wizard.

Enter IP Address and Network Information

Set the IP address and network information for the Ethernet port:

Note: Leave the interface static unless using a DHCP server on the network that the device is connecting to. If you select DHCP client, you need to know which address is assigned to the Conduit. For information on DHCP settings, refer to DHCP in the AEP Help.

1. Type the device's **IP Address**.
2. Enter the network **Mask**.
3. Enter the **Gateway** address (optional and not displayed when **Cellular** is enabled).
4. Enter the **Primary DNS** server address (optional and not displayed when **Cellular** is enabled).
5. Enter the **Secondary DNS** server address (optional and not displayed when **Cellular** is enabled).
6. Click **Next**.

Configuring Access

When Cellular is disabled, the default settings enable HTTPRedirect to HTTPs via LAN.

Note: Enabling HTTPs via WAN can increase security risk including allowing web users to access the WAN interface.

1. Under **HTTPRedirect to HTTPs,** check **Enabled** to turn on or uncheck to turn off.
2. Enter **Port** or use default value.
3. Check either **Via LAN** or **Via WAN**.
4. Under **HTTPs**, enter **Port** or use default value.
5. Click **Finish**.