

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	MTAC-LORA-915 (NA)	MTAC-LORA-868 (EU)
Enabled	Checked	Checked
Frequency Band	915	868
Frequency Sub Band	1 to 8	NA
Additional Channels	NA	863.5 – 867.5 MHz
		869.1 – 869.5 MHz
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>.

- 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)

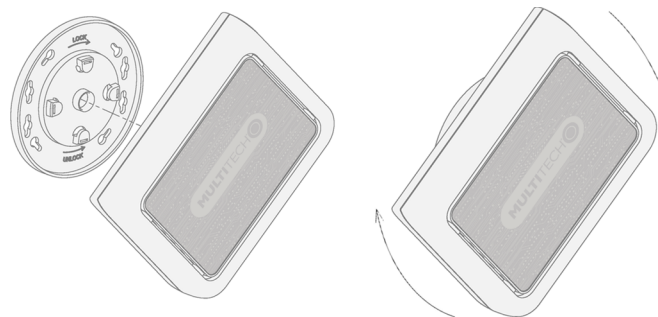
Determining Location for the MTCAP

- Select a location that is central to all the devices you want to connect to this MTCAP. Place the device as high as possible, such as near the top of a wall.
- Avoid obstructions. Thick walls and reflective surfaces, such as metal, weaken the signal between the MTCAP and other devices.
- Note the location of the LoRa antenna in the following image. The signal will be strongest radiating from that side of the device. The LoRa antenna is 31.2 mm long.
- The LoRa antenna is an omni-directional antenna, but for best results, mount the device so the LoRa antenna is in a vertical position near the top of a wall. 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 the MultiConnect Conduit Access Point Developer Guide, which is available at www.multitech.com.

MultiTech declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity may be requested at <https://support.multitech.com>.

MultiConnect® Conduit™ Access Point Quick Start

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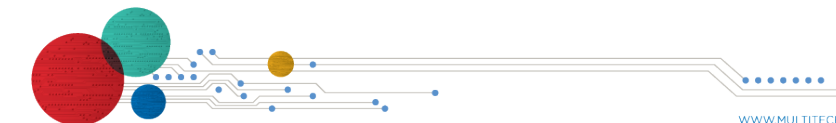
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**MultiConnect® Conduit™ Access Point
MTCAP for AEP Quick Start**



Welcome

MultiConnect Conduit Access Point (MTCAP) connects thousands of IoT assets to the cloud using the LoRaWAN® protocol. It expands LoRa network coverage to difficult to reach areas and is capable of packet forwarding user data between LoRa end points and a centrally located network server on the cloud, in a data center, or a public network.

Package Contents

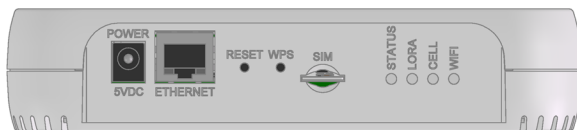
Your device ships with the following:

1 – MultiConnect Conduit Access Point 1 – 5 Volt Power supply

1 – RJ45 Ethernet cable 1 – Quick Start

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 the device or restores factory defaults.
WPS	Used by -002L models only. Wi-Fi pairing switch.
SIM	Available in -LEU1 and -LNA3 models only. SIM slot.

Item	Description
LEDs	
STATUS	Blinks when operating system is fully loaded.
LORA	Lights when LoRa software is active.
CELL	Used by -LEU1 and -LNA3 models only. Lights when there is power to the cellular radio. Blinks when the SIM is registered with the carrier.
WIFI	Used by -002 models only. Lights when there is a Wi-Fi connection.
Ethernet Link	Left LED on the Ethernet connector. Blinks when there is transmit and receive activity on the Ethernet link. It shows a 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 it is not lit, the Ethernet is linked at 10 Mbps.

Installing a SIM Card

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



Cabling Your Device

To cable the MTCAP:

- Connect the Ethernet cable to the Ethernet port on the device and to a PC.
- 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:

- 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.
- Type the default user name: **admin**.
- Type the default password: **admin**.
- 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:

- Click **Next** on the Welcome panel.
- In the **Current Password** field, enter the default password, **admin**.
- In the **New Password** field, enter a new password.
- Enter the new password in the **Confirm Password** field.
- Click **Next**.

Setting Time Zone, Time, and Date

To set the time zone, date, and time:

- Type today's **Date** in the format shown or use the calendar (data picker).

- Type the current **Time** (24-hour format).
- Select the **Time Zone** in which the device operates.
- Click **Next**.

Configuring PPP

Note: For models with cellular radios only.

To configure the Cellular PPP:

- To use PPP, check **Enable**. When enabled, your device functions as a cellular device.
- 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.
- The default **Idle timeout** is **180 seconds**. If desired, you can enter a different value.
- Type the **APN** (Access Point Name). The APN is assigned by your wireless service provider.
- Click **Next**.

Setting Up PPP Authentication

To setup cellular PPP authentication:

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

- Type the device's **IP Address**.
- Enter the network **Mask**.
- Enter the **Gateway** address (optional and not displayed when **Cellular** is enabled).
- Enter the **Primary DNS** server address (optional and not displayed when **Cellular** is enabled).
- Enter the **Secondary DNS** server address (optional and not displayed when **Cellular** is enabled).
- 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.

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