

OneBox^{IM} Smart Building Quick Start





Additional Documentation

For additional MTCAP documentation, go to:

https://www.multitech.com/brands/multiconnect-conduit-ap and select the specific model.

For additional sensor documentation, go to:

https://www.multitech.com/products/sensors and select the specific sensor.

OneBox Smart Building Quick Start

Part Number: 82131201L

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OneBox Smart Building Kit

MultiTech OneBox™ kit includes a tailored set of LoRa[®] enabled sensors and an easy-to-deploy Conduit[®] AP gateway for LoRaWAN[®] that brings data from sensors to the cloud, regardless of the application. OneBox provides automatic monitoring and configuration as well as notifications for immediate access to critical information.

Package Contents



- 1. Conduit AP (MTCAP) gateway
- 2. Ethernet cable
- 3. Antenna
- Power supply
- . Conduit AP mounting bracket
- 6. Wireless Air Temperature & Humidity Sensor
- 7. Wireless Water Leak Sensor
- . Single Push Button Sensor
- 9. Wireless Acceleration-based Movement Sensor
- 10. Wireless Door & Window Sensor

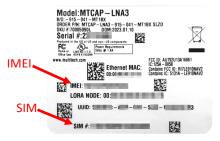
Not pictured: Adhesive strips, magnets, and tamper resistant screws for sensors and documentation.

SIM Activation

The MTCAP has a pre-installed KORE SIM card for 90 days of free cellular connectivity. Refer to the KORE document included in the box for SIM activation instructions.

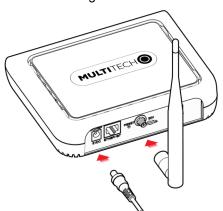
For SIM activation, you need the MTCAP IMEI number and SIM number from the MTCAP label.

When you submit the form, KORE sends an email to confirm that your SIM is activated.



Preparing the MTCAP Gateway

After receiving the SIM activation confirmation, prepare the MTCAP gateway:



- 1. Finger-tighten the antenna to the antenna connector on the MTCAP.
- 2. Attach the power blade to the power supply.
- Connect the power supply to the MTCAP power jack and plug it into an electrical outlet. When the MTCAP is ready to use, the STATUS LED blinks.

The MTCAP is pre-configured for the OneBox; you do not need to configure device settings.

For your records, the MTCAP login information:

Username: admin

Password: Admin[serial number]

Installing the MultiTech App and Creating a Console Account

To manage and monitor sensors, you need a Radio Bridge Console account. The MultiTech App simplifies connecting your MTCAP and sensors to the console. To get the app and create an account:

1. Download and install the MultiTech app of from the App Store or Google Play.





RADIO

- 2. Open the app. If you don't have a Radio Bridge Console account, tap Create one here. The app opens a browser to the Radio Bridge Console.
- 3. Enter your First Name, Last Name, Email, and Password. Re-enter Password to confirm it.
- 4. Check to agree with Terms and Conditions and tap Register.
- After you receive the confirmation email, click Confirm Account in the email to activate your account. Then, return to the MultiTech app and log in with your console account

Registering the MTCAP Gateway

When the STATUS LED is ready (blinking) on the MTCAP, register the gateway through the

- 1. Tap **Gateways** and then tap **Add**.
- 2. Tap Chirpstack.
- 3. Tap the camera icon on the Add Gateway screen and scan the EUI QR code on the device. The EUI QR code is on a small sticker on the MTCAP not the main product label.

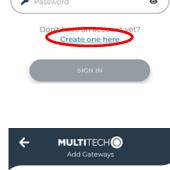


- 4. Enter Gateway Details to register the gateway. Region is detected automatically from the device.
 - Gateway Name to identify the gateway.
 - IP address: 192.168.2.1
 - Description to describe the gateway.
- 6. Tap **Finish** to add the gateway to the console.

Adding Sensors

To register sensors through the MultiTech app:

- 1. Tap Sensors and then tap Add.
- 2. Tap Chirpstack.
- 3. Enter a **Sensor name**. The app increments this by one for each sensor of the same type.
- 3. Tap Save.
- 4. Tap the camera icon to scan the QR code on the device's yellow key card (in the sensor's package).
- 5. For some sensors, the app prompts you to select a region and sensor type.
 - Select EU868 for Europe or US915 for North America.
 - Select the sensor type. The OneBox sensors are at the top of the list.
- 6. Tap **Next.** On the **Add Sensors** page, tap the **Finish**.
- 7. Repeat these steps for each sensor.









Preparing Sensor Hardware

Sensors ship with batteries installed. There is a plastic tab over the battery, which needs to be removed. Pull the tab out of the sensor to connect the battery. If the tab does not pull out easily, you may need to open the case to remove it.

To open the case:

- 1. Use a pen or similar object to press the button on the opposite side of the case.
- 2. Remove the battery tab. You may need to remove the battery to remove the tab.
- 3. Re-insert the battery and close the case.

To open the Single Push Button sensor:

- 1. Loosen screws and lift the back slightly.
- 2. Remove the battery tab.
- 3. Close the case and hand-tighten the screws. Do not overtighten.

To remove the battery tab from the Air Temperature Humidity Sensor

- 1. Turn the mounting bracket counterclockwise to remove it from the sensor.
- 2. Remove the battery tab.
- Reattach the mounting bracket.

Mounting Sensors

Use the included large adhesive pad with a sensor to secure the case in position.

For increased security, open the case, and fasten it to the wall using the included tamper screw as shown. Then reassemble the case. The tab will break away and send a tamper alert if the case is forcibly removed.

For the Window/Door Sensor, mount the sensor on the door or window frame with the notch facing the door or window as shown. Attach the magnet piece to the door or window so it aligns with the notch.

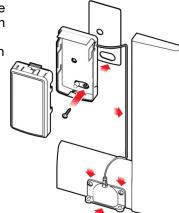
Mounting Window/Door Sensors

Mounting Leak Detection Sensors

Install the water probe so the probe's metal pins are flat on the floor. Use the included screws to attach the probe in position on the floor or wall.

Mount the sensor using the adhesive pad and (optional) tamper screw.

If needed for better positioning, run the wire along pipes or around obstacles. Coil excess wire.



Mounting the Air Temperature Humidity Sensor

To mount the Air Temperature Humidity Sensor:

1. Turn the mounting bracket counterclockwise to remove it from the sensor.

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- 2. Secure the bracket with the enclosed screws.
- 3. Put the sensor on the mounting bracket and turn clockwise.

Viewing Sensor Data

To view sensor data:

Log into the console at https://console.radiobridge.com. The Dashboard appears showing the sensors you added.

