

MUTELCOR

LoRa Alarm Unit

MTC-XX-AU01 / MTC-XX-AU03

Quick Start Guide



Thank you for choosing Mutelcor GmbH.
We are proud to be part of your project.

1. Need Help?

For any other query related to our product, please contact the local distributor or Mutelcor at support@mutelcor.com

2. Manufacturer

Mutelcor GmbH: An der Bastei 42a, 47259 Duisburg, Germany

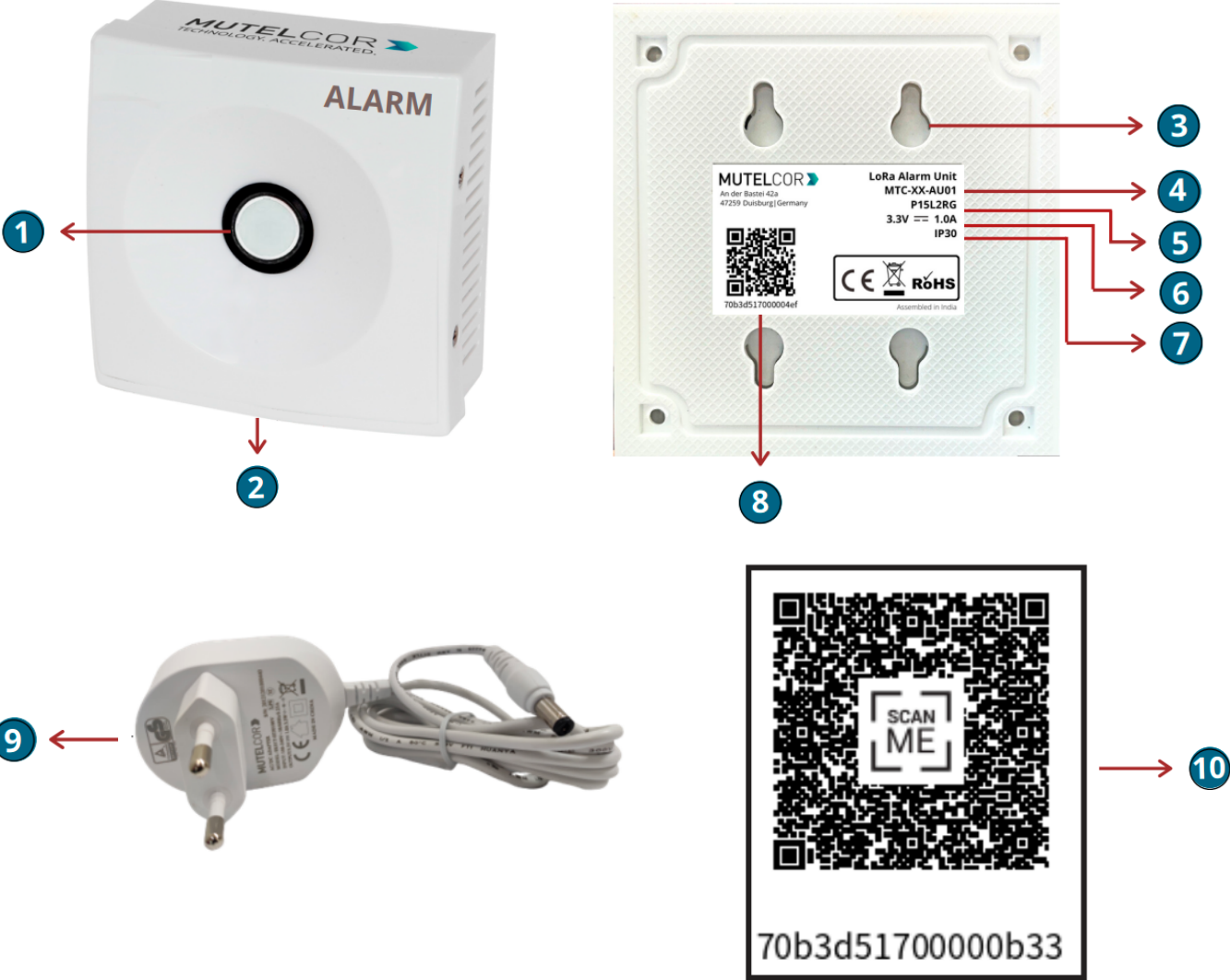
Office: +49 203 72996070, Fax: +49 203 72996071, Web: www.mutelcor.com

3. Safety

Read the instructions carefully before device installation, operation and maintenance

1	Connect the adapter to a properly wired and grounded electrical outlet
2	The device should only be used with accessories or spare parts supplied by your reseller
3	The device enclosure must not be opened when connected to power
4	Maintenance and repair must be carried out by qualified personnel authorized by reseller
5	Keep the device away from any hot surface or outdoor environment

4. Product Description



At a Glance

No.	Description	No.	Description
1	Button / Multi-color LED	6	Power supply Input (3.3V =1A)
2	Jack Connector (for power adapter)	7	Ingress Protection
3	Oblong Holes for Wall Mount	8	DevEUI with QR code
4	Model Name	9	Power Adapter
5	Module ID	10	Device info Access Sticker (optional)

5. Activating the Device



- Provision the device first into a LoRa network before activation
- As long as the device is connected to the power supply, the GREEN LED light glows constantly by default.
- Do not place the device near an air conditioner or a heater

The LoRa Alarm Unit is a Class A Device and can be triggered by a LoRa downlink message. For this, the device sends heartbeat at frequent intervals (fully configurable via OTA commands) to listen and receive downlink messages over LoRaWAN from any backend Application.

The downlink messages sent by an application are called Trigger Alerts and the LoRa Alarm Unit supports up to 4 different types of Trigger Alerts. Each Trigger Alert type results in the LoRa Alarm Unit to respond in a certain configured way. The response behavior for each Trigger Alert Type on the device is defined by the following configurable parameters on the device:

- LED Color (GREEN, YELLOW, RED)
- LED Behavior (OFF, ON, Flashing)
- Time duration of LED
- Buzzer Sound (OFF, ON, Beep)
- Buzzer duration (Time with number of beeps)

The above parameters and the behavior of each Alert Type are fully configurable via OTA command.

The Trigger Alert message sent by a backend Application can also optionally include the time duration for the specific Trigger Alert to be active on the Alarm Unit. This allows the backend Application to fully control the Alerts and their duration on the device. Furthermore, pressing the Button on the Alarm units stops the alarm locally and also sends a LoRa message to the backend application connected to the device.

For all details on changing parameters via OTA Commands, examples of Trigger Alert Messages etc. please refer to the OTA Configurator and Payload documentation or contact your local distributor or Mutelcor GmbH at support@mutelcor.com

LoRa Alarm Unit in combination with Mutelcor LoRa Products

Here are a few examples of the different settings of the LoRa Alarm Unit when used with other Mutelcor LoRa products and Mutelcor Backend Application. All the below settings are fully configurable.

For Mutelcor LoRa Products

- Smart CO2 LoRa Sensor
- LoRa Air Quality Sensor

LoRa Alarm Unit for Status Indication of Thresholds: Constant Green LED when powered ON

Alert Type	LED Color	LED Indication	LED Duration	Buzzer Sound	Buzzer Duration	Beep Interval	Action Required
Alert Type 1 (Device ON)	GREEN	ON	Unlimited	OFF	-	-	None
Alert Type 2 (Lower Threshold)	ORANGE	Flashing	10 min	ON	3 Beeps	0.5 second	Press the button (LED turns GREEN)
Alert Type 3 (Upper Threshold)	RED	Flashing	10min	ON	6 Beeps	0.25 second	Press the button (LED turns GREEN)

For Mutelcor LoRa Products


- LoRa Panic Button with Confirmation
- LoRa Service Call Button
- LoRa Manhole Sensor

LoRa Alarm Unit Status Indication of Alarms raised: Constant Green LED when powered ON

Alert Type	LED Color	LED Indication	LED Duration	Buzzer Sound	Buzzer Duration	Beep Interval	Action Required
Alert Type 1 (Device ON)	GREEN	ON	Unlimited	OFF	-	-	None
Alert Type 4 (Alarm)	RED	Constant ON	10 min	ON	5 Beeps	1 second	Press the button (LED turns GREEN)

Note: If the buzzer in the device continuously beeps at every 8-second interval, then there is a software error. When this happens the device must be returned for repair. Please immediately contact your reseller.

6. Mounting

	<ul style="list-style-type: none"> • Device should be mounted on clean non flammable solid surface • Device must only be used in an indoor environment.
-----------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Avoid the following areas to ensure best product performance and preventing malfunctioning:

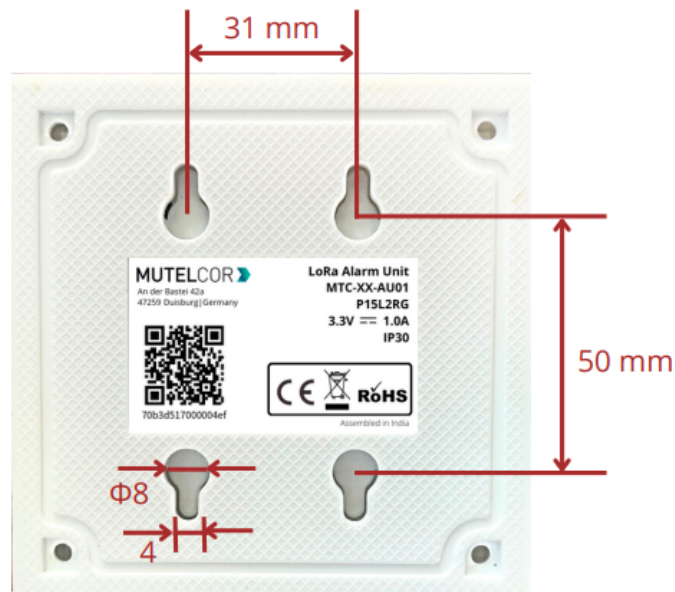
- Areas that are susceptible to vibration
- Near heating appliances
- Areas near the high-voltage cables

The device may be mounted on the wall using two oblong holes

Only two screws (not included) are needed, all mounting information is depicted

(Reference dimension: mm)

Recommended screw size : M3.5 x 20



7. Technical Specifications

Model Name	LoRa Alarm Unit	Enclosure Size	95 x 95 x 55 mm
Module ID	P15L2RG	Net Weight	150 g
Model No	MTC-XX-AU-01 (Red Lens, 2-Color LED) MTC-XX-AU-03 (Transparent Lens, 3-Color LED)	Power Adapter	Input: 100-240V~50/60Hz Output: 3.3V=1A, 3.3W
Model No. (XX) LoRa Frequency	EU: EU 863-870 IN: IN865-867 US: US 902-928 AU: AU915-928 AS: AS923-1 KR: KR920-923 IL: AS923-4 OTAA and ADR supported	Operating Temperature	-18°C to +55°C
		Transmission Power	Max 25mW (14 dBm)
LoRaWAN Version	MAC V1.0.3	Ingress Protection	IP30


8. Declaration of Conformity

Hereby, Mutelcor GmbH, declares that the Product is in conformity with the essential requirements of Article 3.1 (a) the protection of the health, 3.1 (b) an adequate level of electromagnetic compatibility and 3.2 effective use of the spectrum of 2014/53/EU

The CE mark appears due to the issued declaration of conformity under responsibility of Mutelcor GmbH as manufacturer, who declares that the used radio equipment is in compliance with relevant EC Directives. For any further information, please contact Mutelcor GmbH at support@mutelcor.com

In Europe, the Sensor also complies with EN62479 and ERC requirements regarding duty cycle and maximum EIRP

9. Disposal / Recycling

	<p>Do not dispose of the product with household waste. For proper disposal, contact a waste disposal company WEEE-Reg.-Nr.: DE 71445608</p>
-----------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------

10. Product complies and Directives




ETA



Equipment Type Approval (INDIA)
 Issue by Wireless Planning and Coordination (WPC)
 DEPARTMENT OF TELECOMMUNICATIONS

11. Warranty


Contact your reseller for warranty

	<p>LoRa Alarm Button is not warranted by Mutelcor GmbH in case the enclosure is opened, modified, broken, painted, branded out, outlined for any reason</p>
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------

The forgoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Mutelcor GmbH be liable for any consequential, special or incidental damages


12. Find us on social media

We would like to hear from you: any tips, any news to share?

 www.facebook.com/mutelcor

 Mutelcor GmbH

We stay at your disposal for any help on your project



Learn More
For complete product information
Scan QR code or Visit
www.mutelcor.com

Mutelcor GmbH Team