

miro Alarm

Class C LoRaWAN® RGB LED and
alarm buzzer notification device

Audiovisual feedback via LoRaWAN®
class C for immediate alert and
notification

Description

miro Alarm is a highly versatile, LoRaWAN® enabled device for audiovisual feedback of remote events. Powered directly by USB, it can make full use of the LoRaWAN® Class C device standard to provide permanent availability.

The RGB color scenes to be used for alarming and notification are fully customizable over-the-air, allowing it to be adapted to any use case. Melodies played by the high sound pressure buzzer are factory programmable.

It is compatible with all LoRaWAN® networks and can easily be integrated into any existing infrastructure setup.



Features

- ▶ LoRaWAN® class C compliant device
- ▶ High sound pressure buzzer (100 dB)
- ▶ High brightness RGB LED
- ▶ Configurable color scenes
- ▶ Programmable buzzer melodies
- ▶ Optional relay output
- ▶ USB powered

Applications

- ▶ Alert and notification
- ▶ Signaling
- ▶ Emergency escape

Document Information

About

File name	Document type	Date	Revision
DS miro Alarm	Datasheet	2022-02-28	1.1

Revision history

Date	Release	Changes
2021/03/02	1.0	Initial Release
2022/02/28	1.1	New design and image

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Functional Description

miro Alarm is a highly versatile, LoRaWAN® enabled device for audiovisual feedback of remote events. Powered directly by USB, it can make full use of the LoRaWAN® Class C device standard to provide permanent availability. The RGB color scenes to be used for alarming and notification are fully customizable over-the-air, allowing it to be adapted to any use case. Melodies played by the buzzer are factory programmable.

The device is powered over a micro-USB connector. In case of an alarm, a downlink message is sent to device, selecting one of the preset scenes. A scene is a freely configurable combination of color and melody. Optionally, **miro Alarm** can be equipped with a relay, to provide a potential free output to switch other devices.

miro Alarm is compatible with all LoRaWAN® networks and can easily be integrated into any existing infrastructure.

Technical Specifications

Mechanical specifications

Weight	41 g
Dimensions	Ø 74 × 25 mm
Enclosure	Plastic, ABS

Operating conditions

Temperature	0 – 80 °C
Humidity	0 – 95 % RH, non-condensing

Device power supply

Power supply	micro USB connector, 5V / 1W
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Alarm indication

LED	16 × high brightness RGB LED
Buzzer	High sound pressure alarm buzzer, melodies
Sound pressure	100 dB @ 10cm, 4,000 Hz

Radio / wireless

Wireless technology	LoRaWAN® 1.0.3, 868 MHz / 915 MHz
LoRaWAN® device type	Class C
Supported LoRaWAN® features	OTAA, ADR, Adaptive Channel Setup
Maximum RX sensitivity	-137 dBm
RF transmission power	14 dBm / 20 dBm (depending on region)

Certifications

CE	RED 2014/53/EU
FCC	Contains FCC ID 2AUQE14DJC

Mechanical Dimensions

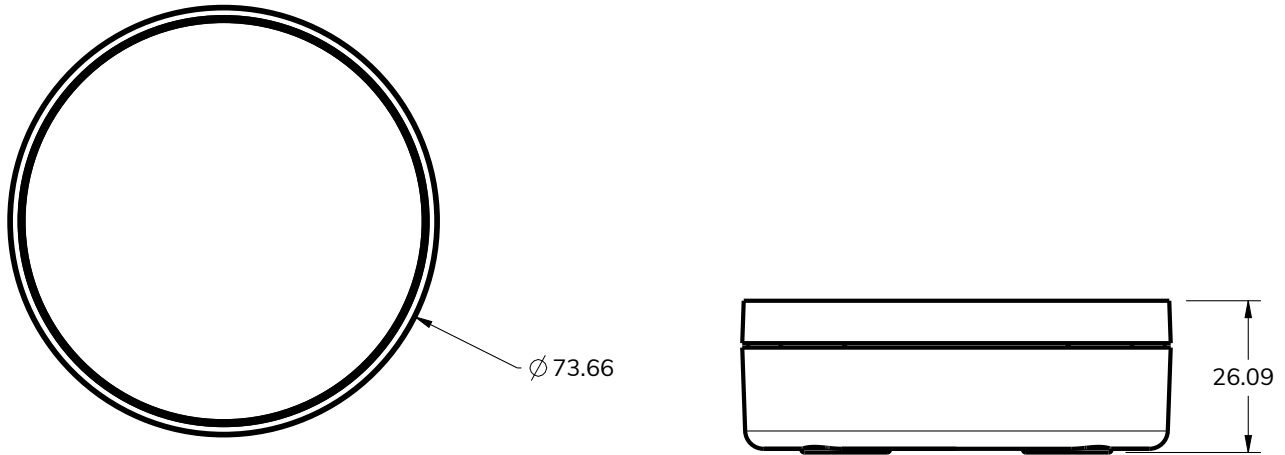


Figure 1: Mechanical Dimensions in mm

Additional Documentation

Additional Resources

Product Information Page	miromico.ch/miro-alarm
Technical Documentation	docs.miromico.ch/miro-alarm/dev

Device Options

Product ID	LoRaWAN [®] region					Options
	EU868	US915	AS923	AU915	IN865	Relay Output
IOT-ALARM-LW/*	✓	✓	✓	✓	✓	
IOT-ALARM-LW/*-RLY	✓	✓	✓	✓	✓	✓

* LoRaWAN[®] region (e.g. EU868)

Keep in touch

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