

miro

Alarm

Class C LoraWAN® RGB LED and alarm buzzer (optional) notification device

Visual 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.

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

Features

- LoRaWAN® class C compliant device
- High brightness RGB LED
- USB powered

Applications

- Alert and notification
- Signaling
- Emergency escape



Document Information

About

File name	Document type	Date	Revision
DS miro Alarm	Datasheet	2022-04-14	1

Revision history

Date	Release	Changes
2022-04-14	1.0	Initial release

Table of content

Document Information	2
Functional Description	3
Technical Specifications	4
Mechanical Dimensions	5
Additional Documentation	6
Device Options	6
Keep in touch	7



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. Optionally, **miro Alarm** is equipped with a buzzer (factory programmable) and can play melodies.

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 colors and melodies.

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



Technical Specifications

Mechanical speciafications	
Weight	300 g
Dimensions	124 × 124 × 39 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
	(USB power supply and 2 m cable included)
Radio / wireless	
Wireless technology	LoRaWAN® 1.0.3
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)
Alarm indication	
LED	24 × high brightness RGB LED
Certifications	
CE	RED 2014/53/EU
UKCA	Radio Equipment Regulations 2017



Mechanical Dimensions

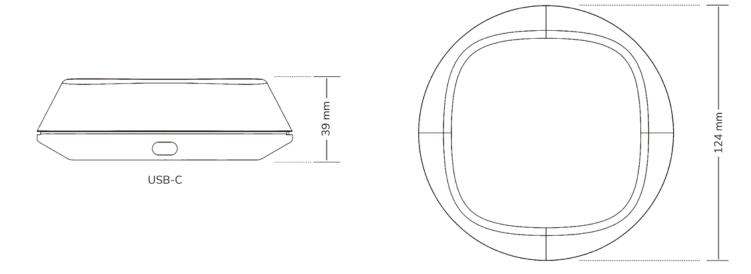


Figure 1: Mechanical Dimensions



Additional Documentation

Additional Ressources

Product Information Page	Product Website
Technical Documentation	Technical Documentation Website

Device Options

Product ID	LoRaWAN® region				
	EU868	US915	AS923	AU915	IN865
IOT-ALARM-LW/*(AIR)	~	~	**	**	**
IOT-ALARM-LW/*(BUZ)	~	~	**	**	**

^{*} LoRaWAN® Region (e.g. EU868)

^{**} on request



Keep in touch

Miromico AG Gallusstrasse 4 CH-8006 Zürich Switzerland

info@miromico.ch www.miromico.ch



We reserve the right to make technical changes, which serve to improve the product, without prior notification.

LoRa®, Semtech®, the Semtech logo, LoRa®, and LoRaWAN® are registered trademarks or service marks of Semtech Corporation, the LoRaAlliance® or its affiliates.

SAFETY-CRITICAL, MILITARY, AND AUTOMOTIVE APPLICATIONS DISCLAIMER: Miromico products are not designed for and will not be used in connection with any applications where the failure of such products would reasonably be expected to result in significant personal injury or death ("Safety-Critical Applications") without an Miromico officer's specific written consent. Safety-Critical applications include, without limitation, life support devices and systems, equipment, or systems for the operation of nuclear facilities and weapons systems. Miromico products are not designed nor intended for use in military or aerospace applications or environments. Miromico products are not designed nor intended for use in automotive applications unless specifically designated by Miromico as automotive grade.

© 2022 Miromico AG. All rights reserved.