miro Alarm

Fully customizable audio-visual notification device via LoRaWAN® class C with optional buzzer or siren



Description

The **miro Alarm** is a highly versatile, LoRaWAN® enabled device for audiovisual feedback of remote events. Powered directly via USB C, it takes full advantage of the LoRaWAN® Class C device standard to provide permanent availability.

LED color, flashing pattern, and sound behavior can all be configured wirelessly, over-the-air (OTA).

The device comes in three variants: LED only, for purely visual notification; a buzzer, configured to play different tones and melodies; and a High Sound Pressure (HSP) siren, embedded directly into the alarm to alert for extreme failures or emergencies.

Full compatibility with other LoRaWAN® networks means that the **miro Alarm** can be easily integrated into any pre-existing infrastructure, and tailored to any use case.

Features

- LoRaWAN® class C compliant device
- Full-spectrum RGB LEDs
- Flash/fade lighting patterns
- Optional sound buzzer
- Optional HSP (High Sound Pressure) Siren
- Fully-configurable audio-visual ‘scenes’
- Powered by USB-C

Applications

- Alert and notification
- Healthcare
- Smart retail
- Supply chain & logistics
- Facility management
- Emergency Notification
- Event signalling

Document Information

About

File name	Document type	Date	Revision
DS miro Alarm HSP	Datasheet	2026-07-29	2.0

Revision history

Date	Release	Changes
2022-04-14	1.0	Initial release
2026-07-29	2.0	Complete rework of datasheet Updated with siren variant

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Functional Description

The **miro Alarm** is a LoRaWAN® device designed for the audiovisual notification of remote events.

Since the device is powered directly by USB-C, it can takes full advantage of the LoRaWAN® Class C device standard, which provides continuous, full device availability for recieving downlinks with near-zero latency.

When an alert of some kind is required, a downlink message is sent to the device to activate one of it's preset scenes. The scene defines the alarm's behaviour (lights changing color, blinking/fading, buzzer noise etc.), and are all fully customizable over-the-air (OTA).

Optionally, the **miro Alarm** can be equipped with either a buzzer or High Sound Pressure Siren. The buzzer can play a variety of tones, which can be played as individual alerts or melodies, alongside the changing LEDs for audiovisual notification.

The high sound pressure siren is embedded directly into the device body to alert for extreme failures or emergencies. See Technical Specifications for more info.

⚠ WARNING — LOUD SIREN (105 dB)
The siren configuration of the device has a 105 dB output. Risk of hearing damage at close range. Wear ear protection during setup and testing.

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	USB-C connector, 5V / 1W
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
Siren	
Manufacturer	Mallory Sonalert
Part number	PS-953Q
Sound	105 dB SPL @ 1m
Certifications	
CE	RED 2014/53/EU
UKCA	Radio Equipment Regulations 2017
FCC	Pending
MIC	R210-262994

⚠ FCC Caution:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
Changes or modifications not expressly approved by the party responsible for compliance could void the user‘s authority to operate the equipment.

Mechanical Dimensions

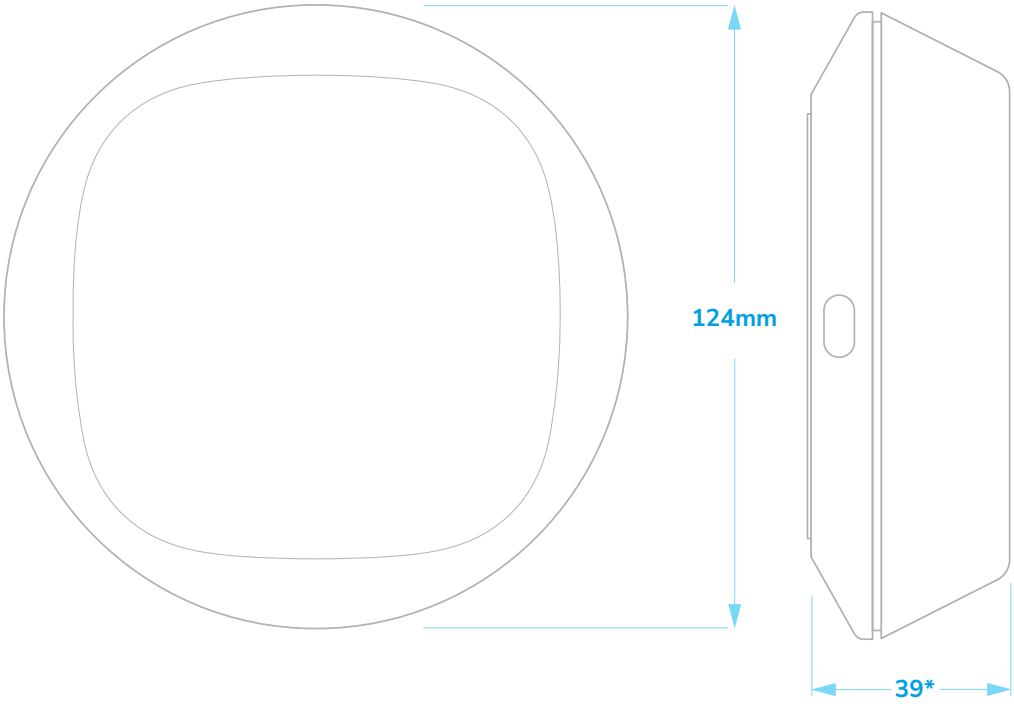


Figure 1: Alarm (+ Alarm Buzzer) Mechanical Dimensions in mm

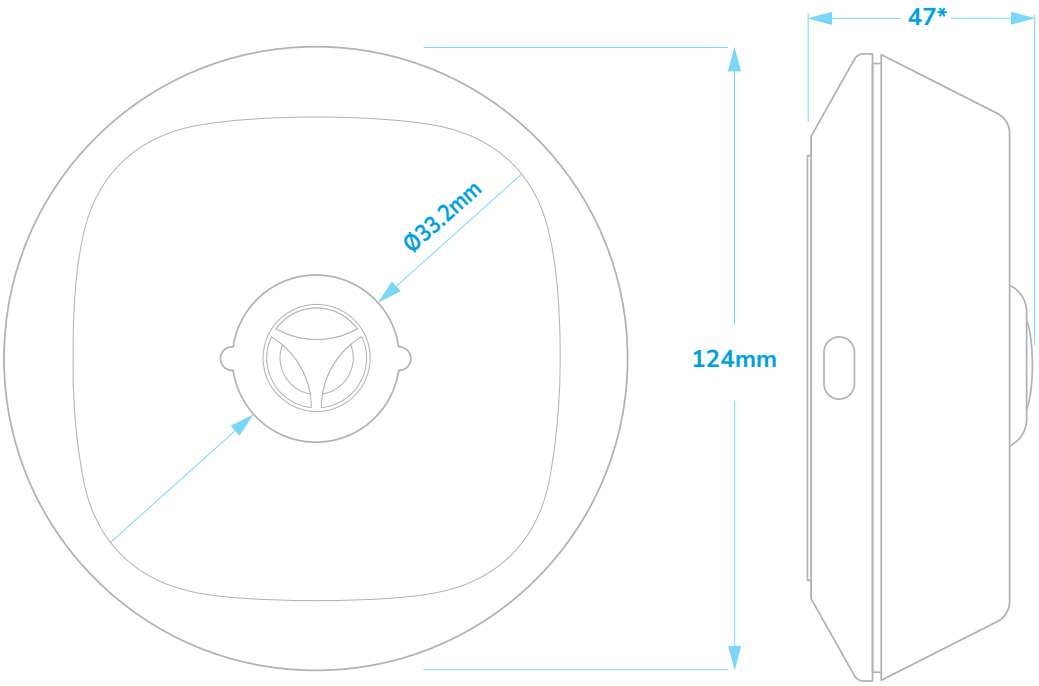


Figure 2: Alarm (Siren) Mechanical Dimensions in mm

** Total device height may vary slightly due to compression of adhesive foam base*

Additional Documentation

Additional Ressources

Product Information Page	Product Website
Technical Documentation	Technical Documentation Website

Device Options

Product ID	LoRaWAN® region			Device options	
	EU868	US915	AS923	Buzzer	Siren
ALM-LW-868	✓				
ALM-LW-915		✓			
ALM-LW-923			✓		
ALM-LW-868-BUZ	✓			✓	
ALM-LW-915-BUZ		✓		✓	
ALM-LW-923-BUZ			✓	✓	
ALM-LW-868-HSP	✓				✓
ALM-LW-915-HSP		✓			✓
ALM-LW-923-HSP			✓		✓

Keep in touch

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