miro LogiButton



IOT BUTTON WITH INTEGRATED DISPLAY

LoRaWAN® IoT Button with LCD for warehouse management and logistics use cases.



miro LogiButton enables you to place orders by merely pressing a button. The customizable text will give immediate user feedback.

miro LogiButton also integrates a hall sensor to implement object presence detection, such as a door opening counter. The additional high-precision temperature sensor creates new options for stock management in combination with temperature monitoring. This helps to protect critical goods such as medications.

With the batteries inside the water-proof housing, **miro LogiButton** can be in service for up to 10 years.

KEY BENEFITS

- LoRaWAN® compliant class A device
- Character LCD for user feed-back
- Configurable feed-back text
- RGB LED for signalization
- Integrated hall sensor for object presence detection
- Integrated temperature sensor
- Waterproof housing with sealing
- Battery lifetime of up to 10 years

APPLICATIONS

- Facility management services
- Warehouse digitalization
- Order-on-demand
- Temperature monitoring

Document Information

ABOUT

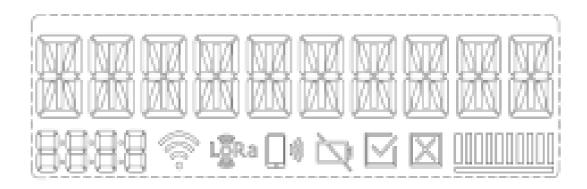
File name	miro LogiButton datasheet		
Document type	Datasheet		
Date	02.03.2021		
Revision	1.100		

REVISION HISTORY

Date	Release	Changes	

Functional Description

miro LogiButton is a versatile order button for service-on-demand, facility management solutions, and logistics and warehouse management use cases. It offers a single button to trigger an action, whereas the RGB LED provides direct feedback to the user. The LCD can display up to 10 characters to provide information to the user promptly and persistently. Additional symbols can be used for use case specific signalization.



To ensure service continuity, **miro LogiButton** is sending a status heartbeat message in a configurable interval.

The button supports different operation modes:

Mode1

Mode2

Mode3

Mode4

All settings, such as mode settings and text, are configurable over-the-air through a LoRaWAN® downlink command.

miro LogiButton also integrates a hall sensor to implement object presence detection, such as a door opening counter.

The additional high precision temperature can monitor environmental temperature and create alarm whenever the situation needs extra attention.

miro LogiButton is encapsulated in a sealed waterproof housing, designed to withstand regular cleaning, e.g., hospital environments. The two AAA high-performance 1.5V primary lithium cells are user-replaceable and can last for up to 10 years, depending on the use case.

Use case specific firmware modifications are available on request.

TABLE OF CONTENT

Document Information	2
Functional Description	3
Technical Specifications	5
Sensor Specifications	6
Device Options	7
Keep in touch	7

Technical Specifications

MECHANICAL SPECIFICATIONS

Weight	Xx g		
Dimensions	85 x 19 x 27 mm		
Enclosure	Plastic, ABS		
Protection	Waterproof, sealed		

OPERATING CONDITIONS

Temperature	-20 – 80 °C
Humidity	0 – 95% RH, non-condensing

DEVICE POWER SUPPLY

Battery type	2 x AAA, 1.5V lithium primary cells			
Expected battery lifetime	> 10 years			

RADIO / WIRELESS

Wireless technology	LoRaWAN® 1.0.3
LoRaWAN® Device type	Class A
Supported LoRaWAN® features	OTAA, ADR, Adaptive Channel Setup
Link budget	137 dB (SF7) to 151 dB (SF12)
RF transmission power	14 dBm / 20 dBm (depending on region)

Sensor Specifications

TEMPERATURE

Range	-40 – 90 °C
Resolution	0.01 °C
Accuracy (typ.), see Figure 1	± 0.1 °C

HALL SENSOR

Sensitivity	4.8 mT, omnipolar
Orientation	<u>see</u>

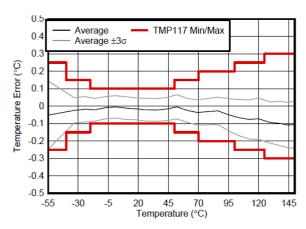


Figure 1

Device Options

PRODUCT ID	LoRaWAN® REGION			EGIC	NC	OPTIONS
	EU868	US915	AS923	AU915	IN865	
IOT-LCD-LW/□	•					

Keep in touch

Miromico AG

Gallusstrasse 4 CH-8006 Zürich Switzerland

info@miromico.ch www.miromico.ch https://forum.miromico.ch

DISCLAIMER

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

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.

© 2021 Miromico AG. All rights reserved.

