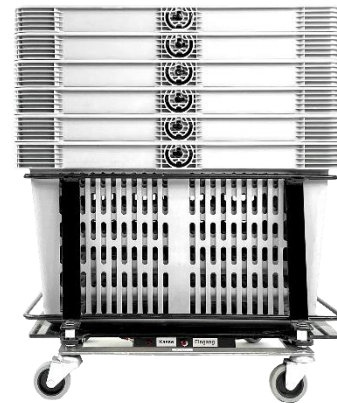


miro Smarket



FULLY INTEGRATED SHOPPING BASKET MANAGEMENT SENSOR DEVICE

Detect and report available shopping baskets in a pile to easily manage refill and distribution within a store



miro Smarket is a smart shopping basket stand that support shops and supermarkets in improving their customers' shopping experience. The patented **miro Smarket** automatically sends notifications when a stand is running out of baskets or the pile of shopping baskets is growing too large.

miro Smarket built-in intelligence is reporting actual fill level using LoRaWAN® technology. The device is fully battery operate, with a battery lifetime of up to one year, thus no local infrastructure is required.

KEY BENEFITS

- LoRaWAN® class A compliant device
- Fill level detection of basket stand
- Support for different basket sizes
- Designed for up to 50 shopping baskets
- Heavy duty steel frame
- User changeable standard AA batteries
- Easy integration with backend system
- Available for 868/915 MHz or 2.4 GHz

APPLICATIONS

- Retail logistics
- Improved customer experience
- Next generation shop management

Document Information

ABOUT

File name	miro Smarket datasheet
Document type	Datasheet
Date	2021/04/25
Revision	1.144

REVISION HISTORY

Date	Release	Changes
2021/04/25	1.1	Added 2.4 GHz frequency and localization info
2020/02/05	1.0	Initial revision

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Functional Description

miro Smarket is a smart shopping basket stand that helps shops and supermarkets to improve their customers' shopping experience. The patented **miro Smarket** notifies a shop employee right in advance when it is running out of baskets or the pile of shopping baskets grows too large.

miro Smarket has built-in intelligence which permanently counts the number of baskets on the stand. The evaluated fill level is reported wirelessly to any IoT cloud application using any public or private LoRaWAN® network. The device is fully battery operated, with an expected battery lifetime of more than one year (depending on configuration, environment, and network quality), thus no local infrastructure is required.

The device supports up to 50 kg of load, which is equal to approximately 50 shopping baskets. Its heavy-duty steel frame can accommodate different standard sizes of shopping baskets. Built on four omnidirectional wheels, it can be easily maneuvered and placed anywhere in a shop.

miro Smarket is reporting the number of baskets in the stand and supports different levels of alarm and notifications to be set directly on the device or in the IoT backend.

miro Smarket can be customized to support ranging for distance measurement, proximity detection or indoor localization on request.

Technical Specifications

MECHANICAL SPECIFICATIONS

Weight	1.5 kg
Dimensions	50 x 35 x 40 cm
Enclosure	Steel frame on wheels

OPERATING CONDITIONS

Temperature	0 – 45 °C
Humidity	0 – 95% RH, non-condensing

DEVICE POWER SUPPLY

Battery type	2x standard primary cell, alkaline, size AA
Expected battery lifetime	> 1 year

RADIO / WIRELESS

Wireless technology	LoRaWAN® 1.0.3, 868 MHz / 915 MHz, 2.4 GHz
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)
Certifications	CE, FCC, RoHS, LoRa Alliance® (depending on region)

Sensor Specifications

BASKET SENSOR

Range	0 to 50 kg
Resolution	Down to 1 standard shopping basket
Accuracy (typ.)	± 1 basket

Additional Documentation

ADDITIONAL RESSOURCES

[Product Information Page](#)

[Product Website](#)

[Technical Documentation](#)

[Technical Documentation Website](#)

Device Options

PRODUCT ID	LoRaWAN® REGION (□)						OPTIONS
	EU868	US915	AS923	AU915	IN865	2G4	
IOT-SMARKET-LW/□	■	■	■	■	■	■	



Keep
in touch

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