

MODULAR INDOOR GATEWAY

High-performance indoor
LoRaWAN® gateway for
868/915 MHz and 2.4 GHz
frequency bands



miro Edge is an OEM / white label product family of affordable, fully LoRaWAN® compatible Gateways. The small form-factor, integrated interfaces like Ethernet, Power over Ethernet (PoE), WIFI, miniPCle, and its underlying OpenWRT based LinuxOS allow integration of these gateways easily into any infrastructure.

Using the built-in web-frontend the Gateway can be configured to communicate with any LoRaWAN® compatible network server.

KEY BENEFITS

- Modular design: 2x mPCle slots
- 8 or 18 channels LoRaWAN® gateway
- ETSI Listen Before Talk (LBT)
- Support for 868/915 MHz and 2.4 GHz
- Ethernet, WIFI, PoE, USB, mini PCle
- Cellular SIM/eSIM support
- Preconfigured or simple web-based configuration

APPLICATIONS

- Smart metering / smart building
- Deep indoor LoRaWAN® coverage
- Industrial and home automation

ABOUT

File name	miro Edge datasheet
Document type	Datasheet
Date	06/04/2021
Revision	1.0.108

REVISION HISTORY

Date	Release	Changes
06/04/2021	1.0	Initial revision

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Functional Description

miro Edge is a product family of cost-effective, fully LoRaWAN® compatible gateways. The small form-factor, integrated interfaces like ethernet, WIFI, mPCIe and its underlying LinuxOS allows to integrate these gateways easily into any infrastructure. The Gateway can be configured to communicate with any LoRaWAN® compatible cloud service.

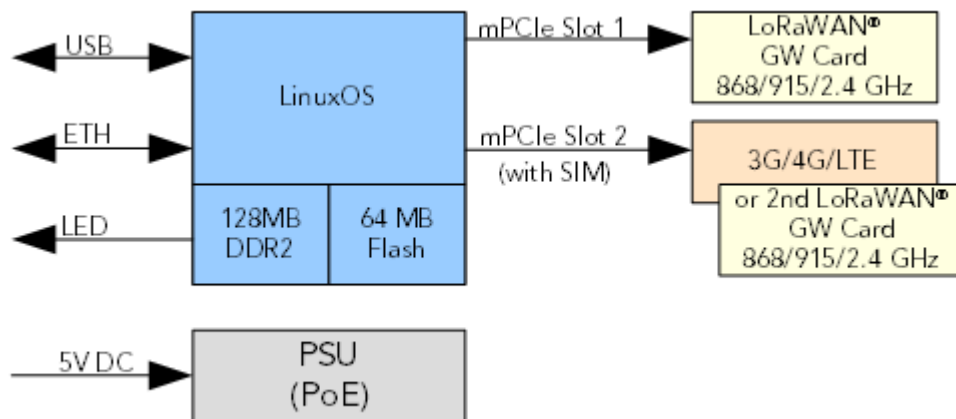


Figure 1: Block diagram miro Edge

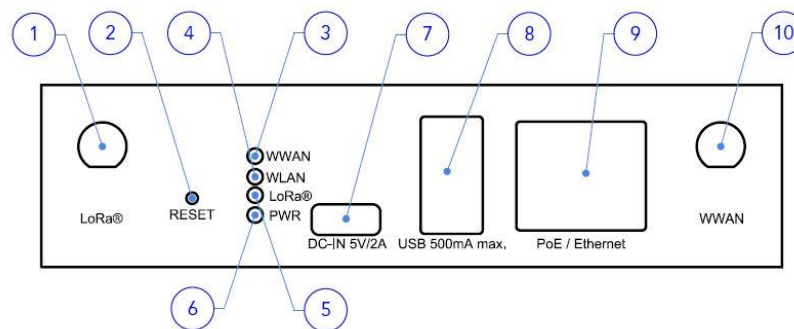


Figure 2: Interfaces

INTERFACES

1	External LoRa® antenna
2	Reset button
3	WWAN LED
4	WLAN LED
5	LoRa LED

6	Power Indicator
7	Power input, USB micro
8	USB device connector
9	Ethernet / PoE
10	External LTE antenna

MECHANICAL SPECIFICATIONS

Weight	175 g
Dimensions	110 x 129 x 33 mm, see Figure 3
Enclosure	Plastic, ABS
Ingress Protection	IP41

OPERATING CONDITIONS

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

DEVICE POWER SUPPLY

Power supply	5 VDC, 12 W USB mini connector
Power over Ethernet (PoE)	802.3af

RADIO / WIRELESS

Supported ISM bands	868 MHz, 915 MHz, 2.4 GHz
Data rates	0.6 – 300 kbps (FSK) SF7-SF12, 125/250/500 kHz (SubG LoRa®)
Rx sensitivity	-139.5 dBm (SF12)
RF transmission power	up to 30 dBm
LoRa antenna	Integrated or external SMA antenna, software selectable
LTE antenna	Dual antenna: one external SMA, one internal

Mechanical Dimensions

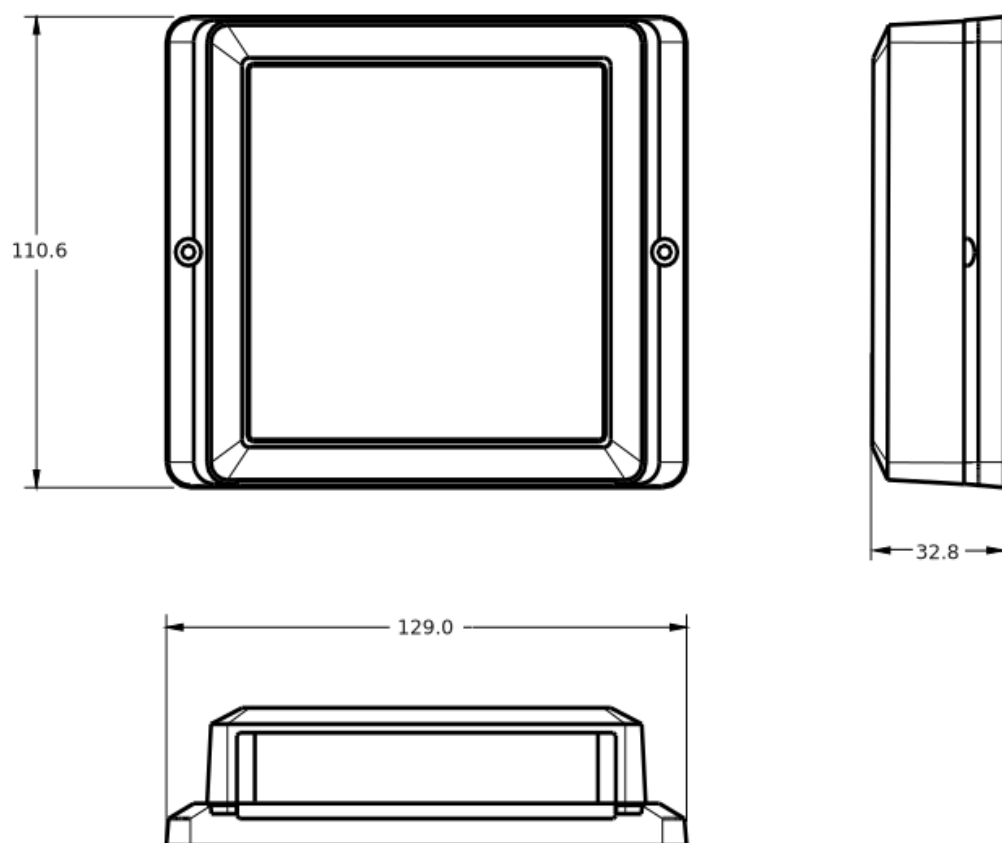


Figure 3: Mechanical Dimensions

Additional Documentation

ADDITIONAL RESSOURCES

CE Certification Documents	pendig
FCC Certification Documents	pendig
Product Information Page	Product Website

Device Options

PRODUCT ID	ISM BAND			OPTIONS			
	EU868	US915	2G4	LTE	Ext. Ant.	DR SIM	BICS SIM
GW-EDGE-LW/□-POE	■	■	■				
GW-EDGE-LW/□-POE-LTE-ANT	■	■	■	■	■		
GW-EDGE-LW/□-POE-LTEBICS-ANT	■	■	■	■	■		■
GW-EDGE-LW/□-POE-LTEDR-ANT	■	■	■	■	■	■	



Keep
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