LoRaWAN GATEWAY EDGE

ITEM NO. 41426

The EDGE Gateway is designed to thrive in harsh environments—whether in dusty, high-vibration industrial sites or weather-exposed urban settings. Built to strict industrial standards, it ensures reliable, long-term operation wherever it's deployed.

Product Features:

Durable Build: IP66-rated waterproof housing with fanless, maintenance-free cooling.

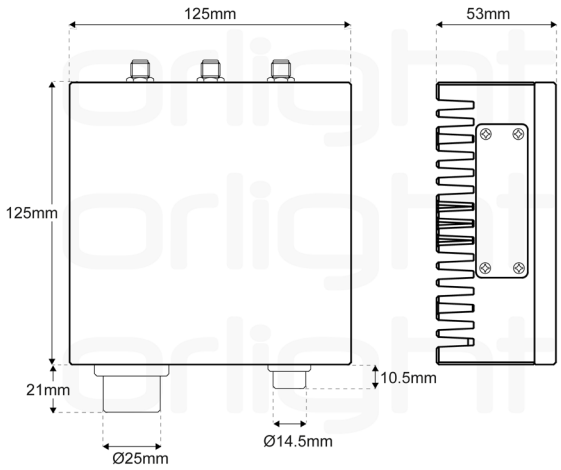
Strong Performance: Quad-core Cortex-A55 1.8GHz processor, 2GB DDR4 RAM, 32GB eMMC storage (expandable).

Flexible Connectivity: Supports DC/PoE power, 4G (Cat.1/Cat.4), and 2.4GHz Wi-Fi.

Stable Software: Linux OS (Kernel 4.19, Debian Stretch 10) for reliable industrial integration.

The EDGE Gateway combines durability, power, and flexibility—perfect for demanding deployment scenarios.

Dimension



EDGE Gateway are available in the following product variants:

The standard mode has the basic function of LoRa and ETH connection (12V DC adaptor included), the customised functions are available to select one or more features according to your needs.

Model	Optional Features	Description
EDGE Gateway_V2-470-510	PoE IEEE802.3af Wi-Fi (2.4G) LTE (Cat. 1 / Cat. 4)	433~510MHz working LoRa frequency, used for China mainland (CN470) LPW band.
EDGE Gateway_V2 -863-870		863~870MHz working LoRa frequency, used for EU868, IN865 LPW bands.
EDGE Gateway_V2-902-923		902~923MHz working frequency, used for AS923, US915, AU915, KR920 LPW bands.

- CPU: ROCKCHIP Quad-core Cortex-A55 64-bit 1.8GHz processor.
  - Standard 2G DDR4 RAM + 32G eMMC 5.1 ROM. Customizable RAM:2G/4G;ROM: 8G/16G/32G/64G/128G.
  - Pre-loaded with Linux (4.19.219 Kernel, aarch 64) Debian 10 operating system.
  - Pre-installed Docker makes TTS V3, ChripStack, etc. applications can bedeployed very easy.
  - LoRa: SX1303 + SX1250 chipsets.
- Ethernet: 10M/100M
- Optional Communication Functions
  - LTE (4G Cat. 1/ Cat. 4)
  - PoE
  - Wi-Fi (2.4GHz)
- Heat dissipation: adopting cooling fan and the motor structure, through unique thermal conductive device transfer heat to aluminum shell, strengthen heat dissipation, commissioning more stable.
- Waterproof and dustproof: IP66
- Working temperature: - 40 ~ 85 ° C.
- Size: 125 (+40) * 125 * 52 mm
- Encryption chip.

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LoRaWAN GATEWAY EDGE

orlight®
FROM SOURCE TO SITE

Technical Specification

Parameters	Description	
Master Chip	ROCKCHIP Quad-core Cortex-A55 64-bit 1.8GHz processors	
RAM	2G DDR4	
ROM	32G eMMC 5.1	
LoRa Chipset	SX1303 + SX1250	
Frequency	433~510 MHz	
	863~870 MHz	
	902~928 MHz	
Optional Functions	PoE IEEE802.3af	48V
	Wi-Fi (2.4GHz)	IEEE 802.11 b/g/n
	LTE②	Cat. 1 / Cat. 4
Max. TX Power	433~510 MHz	21±1dBm
	863~870 MHz	26±1dBm
	902~928 MHz	
Max. Receiving sensitivity	-139 dBm@SF12, 125KHz	
Wi-Fi / Bluetooth (Optional)	802.11 b/g/n, 2.4GHz	
4G (Optional)	CAT. 1, CAT. 4	
Interface	4.5~17V DC interface	
	UART 2.54 * 3 Headers	
	100/1000M ethernet, RJ45 socket	
	SIM card slot (Optional)	
	SMA antenna socket * 3 (LoRa, 4G, Wi-Fi)	
Protection Level	IP66	
Operating temperature	- 40 ~ 85 ° C	
Dimensions	125(+40) x 125 x 52 mm	

Operating conditions

Power supply range

Power supply mode	Minimum	Typical	Maximum	Company
DC powered (≥500mA)	4.5	12	17	V
PoE powered (≥500mA)	40	48	57	V

*Note: When PoE and DC interfaces are connected at the same time, DC power supply is preferred.

Power consumption

Condition	Typical
8 Channel Listening (Receive mode)	160mA
LoRa 14dB Output	200mA
LoRa 17dB Output	210mA
LoRa 22dB Output	215mA
LoRa 27dB Output	220mA

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LoRa RF characteristics

Transmit power

Operating frequency band	Maximum power value/[dBm]
433~510	21 ± 1
867~870	26 ± 1
902~928	

Receiving sensitivity

The following table gives typically sensitivity level of the HT-M02_V2 LoRa gateway.

Signal Bandwidth/[KHz]	Spreading Factor	Sensitivity/[dBm]
125	SF12	-139
125	SF10	-130
125	SF7	-124

Additional Images