



ED-GWL2010

Datasheet

by EDA Technology Co., Ltd

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ED-GWL2010

An Indoor LoRa Gateway Based on Raspberry Pi 4

- Broadcom BCM2711, quad core Arm Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- LPDDR4 from 1GB to 8GB, SD card storage from 32GB to 64GB
- 1 x Gigabit Ethernet, optional 2.4GHz & 5GHz dual-band Wi-Fi/Bluetooth
- LoRa module powered by Semtech SX1302 baseband processor and SX1250 TX/RX front-end
- Support global license-free frequency band including CN470, EU868 and US915
- Support 12V DC power input
- 1 x USER button, 1 x LED
- Integrated super capacitor (backup power supply, optional), RTC, Watch Dog, EEPROM and crypto authentication
- Metal case design, built-in crypto authentication



Specifications

System	
CPU	Broadcom BCM2711, quad core Arm Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
VPU	H.265 (HEVC), up to 4Kp60 decode H.264, up to 1080p60 decode, 1080p30 encode
GPU	OpenGL ES 3.1 & Vulkan 1.0
Memory	Options for 1GB, 2GB, 4GB, 8GB LPDDR4-3200 SDRAM
Storage	Options for 32GB, 64GB SD card storage

software	
Operating System	Raspberry Pi OS (Lite) 64-bit

Panel I/O	
Power	1 x DC IN, DC jack connector, supporting 12V input.
1000M Ethernet	1 x adaptive 10/100/1000M ethernet port, RJ45 connector. It can be used to access the network.
LoRa Antenna Port	1 x SMA port, using to connect LoRa antenna
Wi-Fi/BT Antenna Port	1 x SMA port, using to connect Wi-Fi/BT antenna

Button and Indicator	
Button	1 x USER button, you can define the function according to actual needs.
LED	1 x USER LED, you can define the color according to actual needs.

Internal I/O	
SD Card Slot	1 x Micro-SD card slots, which is used to install SD card. It supports booting the OS and storing user data.
USB 2.0	2 x USB 2.0 ports, dual layer type A connector, each channel supports up to 480Mbps.
USB 3.0	2 x USB 3.0 ports, dual layer type A connector, each channel supports up to 5Gbps.
HDMI	2 x HDMI ports, Micro HDMI connector, supporting 4K 60Hz

Expansion Performance	
Crypto Authentication	It can be matched to realize the required upper layer application and improves the security of device.

Electrical Characteristics	
Input Voltage	12V DC
Power Consumption	18W (Max)

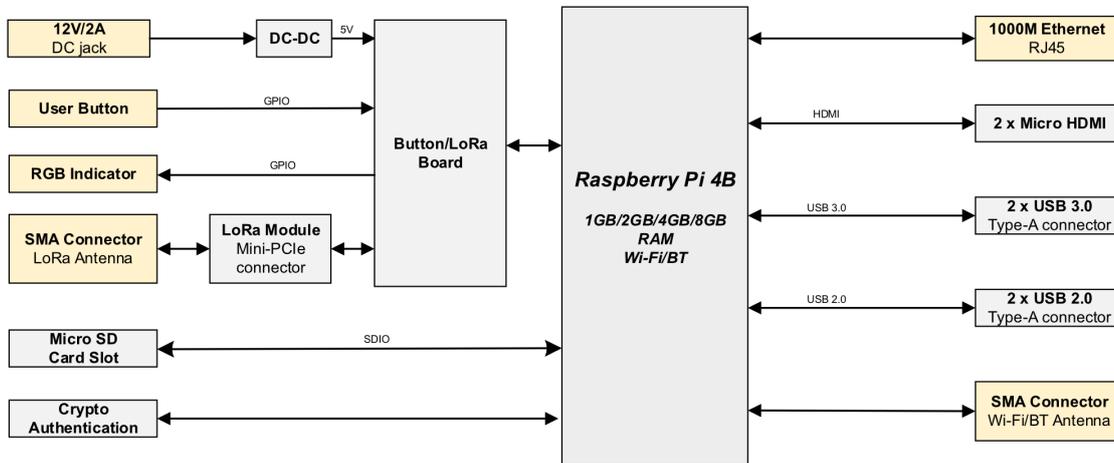
Mechanical Characteristics	
Dimensions	95mm x 95mm x 24mm (WxDxH, antenna is not included.)
Weight	About 300g
Installation	Placing on the desk

Wireless	
Wi-Fi/Bluetooth	2.4GHz & 5GHz dual-band Wi-Fi and Bluetooth with antenna. <ul style="list-style-type: none"> • 2.4GHz Wi-Fi: Compatible with IEEE 802.11 b/g/n • 5GHz Wi-Fi: Compatible with IEEE 802.11 a/n/ac • The Bluetooth supports 2402MHz ~ 2480MHz frequency
LoRa	Support three LoRa modules with antenna <ul style="list-style-type: none"> • EU868 Module: 868MHz • US915 Module: 915MHz • CN470 Module: 470 MHz

Environmental	
Operating Temperature	-25°C ~ 60°C

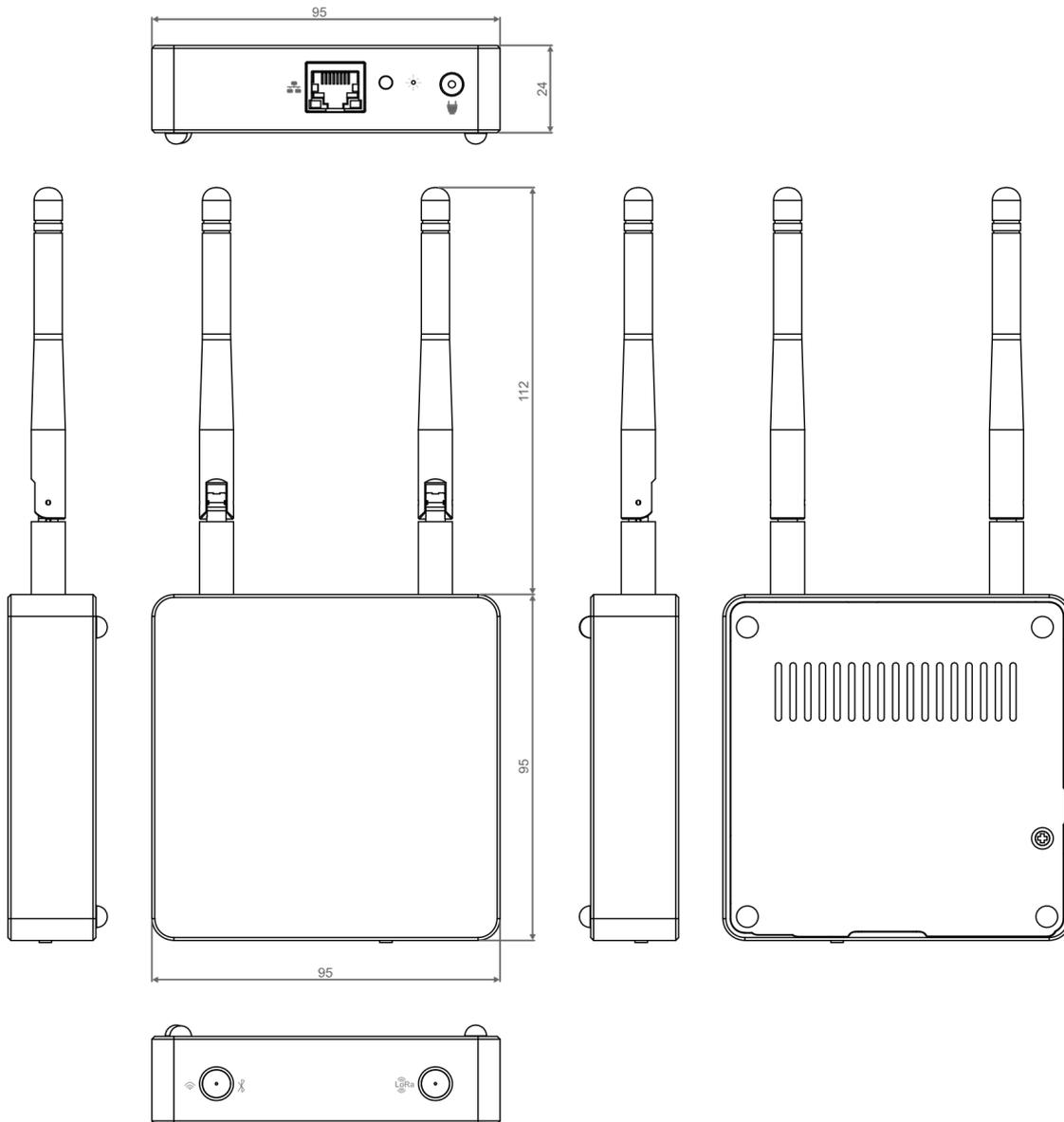
Environmental	
Storage Temperature	-25°C ~ 60°C
Ambient humidity	5% ~ 95% (non-condensing)

System Diagram

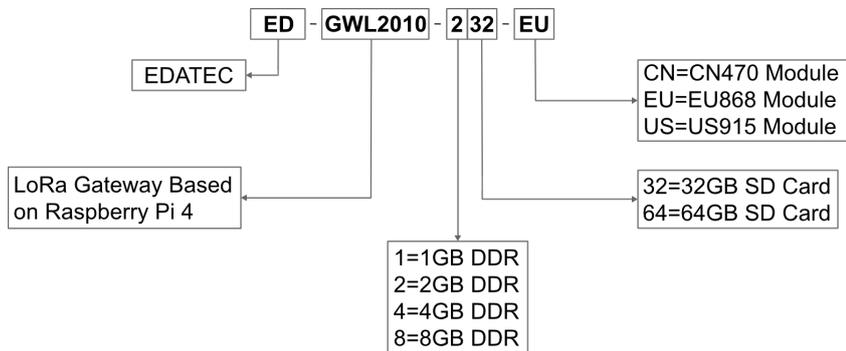


Dimensions

Unit: mm



Ordering Code



Example
P/N: ED-GWL2010-232-EU
 Configuration: An indoor LoRa Gateway Based on Raspberry Pi 4, with Wi-Fi & Bluetooth, 2GB DDR, 32GB SD card and EU868 LoRa Frequency.

Optional Accessory

You can choose a power adapter according to actual needs.

Model	Description	Picture
ED-PSU1202-UK	100~240VAC to 12VDC/2A Adapter, with UK AC plug, 5.5mm DC plug	
ED-PSU1202-US	100~240VAC to 12VDC/2A Adapter, with US AC plug, 5.5mm DC plug	
ED-PSU1202-AU	100~240VAC to 12VDC/2A Adapter, with AU AC plug, 5.5mm DC plug	
ED-PSU1202-EU	100~240VAC to 12VDC/2A Adapter, with EU AC plug, 5.5mm DC plug	

NOTE: Each model contains only one of the UK, US, AU and EU plugs.

Packing List

- 1 x ED-GWL2010 Unit
- 1 x LoRa Antenna
- 1 x 2.4GHz/5GHz Wi-Fi/BT Antenna