ManThink

GDO802 Datasheet

1. Introduction

ManThink GDO802 is a LoRaWAN outdoor gateway with multi-channels and high performance. The strong processing capacity and the flexible secondary-development environment could play a vital role in edge computing, big data, AI, etc.

Features:

- Receive sensitivity is up to -142dBm
- Maximum concurrency can support sixteen up channels and two down channels
- Support LoRaWAN ISM Bands worldwide
- Support ClassA, ClassB and Class C
- High performance MCU and high-speed storage
- Data transmission security based on SSL, MD5, etc.
- Access to other major LoRaWAN Server
- Support customization development based on Linux system

2. Appearance

Die-cast aluminum cast with strong antioxidant capacity, waterproof and dustproof performance. External LoRa antenna is N-type connector with high reliability, strong vibration resistance, excellent electrical performance and mechanical properties. Besides, the customized waterproof connectors RJ-45 for POE is reliable and convenient.

Note: The 4G module is optional. The product is not included in this application. The final sample is based on the actual sample.

GDOx02 Top View

GDOx02 Front View

GDOx02 Side View

3. Specification

SOC	· LS1012A 64-bit ARM Cortex-A53 800MHz 2W
Memory	· support DDR3L 1066 MHz · Memory:512MB
Storage	· 4GB EMMC
LoRa	· Frequency[1]: AS923 923.2M ~ 924.6MHz · Communication speed: 292bps ~ 5.4kbps, support SF7 ~ SF12 · Antenna: Omni-directional · Antenna Gain: 5dBi · Single channel Bandwidth: 125KHz · Channel & working mode[2]: 8 channels & half duplex
Data Backhaul	· Ethernet: 1000M/100M/10M
Timing service	· GPS
Configure port	- USB -Ethernet

Power supply · POE(48V)
Power consumption -5W
Environmental Parameter · Operating temperature: -40℃ ~ 65℃ · Operating humidity: 0% ~ 95%RH · lightning protection: GB50343-2004 B · IP Rate: IP67
Wight · 1.9KG
Dimension · 221mm * 182mm * 75mm

[1]:AS923 is applicable to multiple regions. There are a bit of differences and not listed.

4. Contact

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FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.