HT-M00S

Single-Channel LoRa Gateway

Document version

Version	Time	Description	Remark
Rev. 1.0	2023-12-16	Preliminary version	Richard

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目录

1. Description

1.1 Overview

HT-M00S single-channel lora gateway base on HT-CT62, so that it realizes single-channel LoRaWAN protocol communication. It is a perfect, low-cost tool that can listen to more than a dozen devices[①] at the same time and upload the received data to the cloud via WiFi.

It is worth noting that the gateway does not use an external antenna, so it is mainly used in scenarios such as scheme verification, communication link development, and smart home.

HT-M00S are available in three product variants:

Table 1.1 Product model list

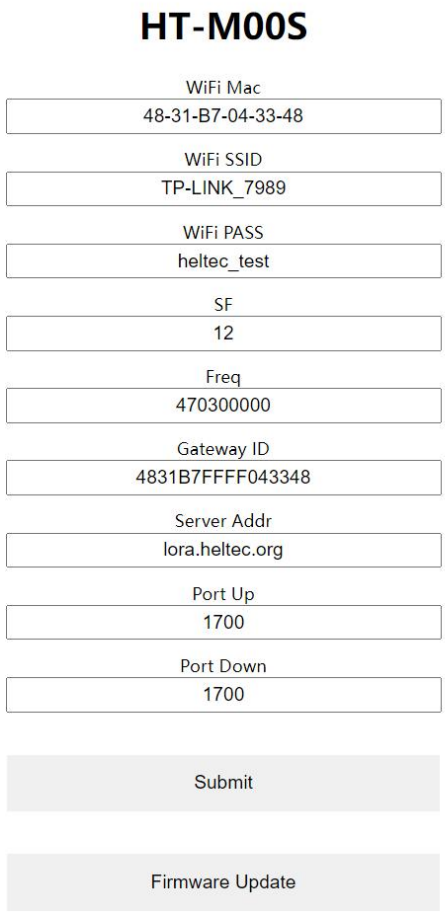
No.	Model	Description
1	HT-M00S-470T510	470~510MHz working LoRa frequency, used for China mainland (CN470) LPW band.
2	HT-M00S-863T870	863~870MHz working LoRa frequency, used for EU868, IN865 LPW bands.
3	HT-M00S-902T923	902~923MHz working frequency, used for AS923, US915, AU915, KR920 LPW bands.

① This recommended number of access devices, test conditions for the transmission period of 10 minute. In general, the longer the sending period and the shorter the sending time, the more devices can be accessed.

1.2 Product features

- MCU: HT-CT62.
- The power supply voltage: USB Type-C 5V.
- Low power, long transmission distance.
- Light and fashionable, cost-effective.
- wall-mounted, simple to install.
- -40°C to 85°C maximum operating temperature range.
- Working bands: Full band coverage corresponds to the working frequency option.
- APP scan QR code for registration, or configure via Wi-Fi, supports OTA update.

Table1.2： HT-M00S setting page



2.Specifications

2.1 General specification

Table2.1: General specification

Parameters	Description
MCU	HT-CT62
Frequency	470~510/863~870/902~923MHz
Wi-Fi	IEEE 802.11 b/g/n 2.4GHz
Max. Receiving. sensitivity	-134dBm
Max. TX Power	21± 1dBm
Supply voltage	5V
Power consumption	See Table2.2.2
Operating temperature	-40~ 85℃
Operating humidity	10%～90%, no-condensing
Dimensions	46*46*13 mm

2.2 RGB light indication

Table2.1: RGB light indication

Color	Condition	Description
Blue	Keep on	Connecting WiFi
Wathet	Keep on	WiFi connection is successful, wait for the server response
Green	Keep on	Network ready, LoRa reception status
Red	Blink	LoRa sending
Yellow	Keep on	AP Configuration Mode

2.3 Operating conditions

2.3.1 Power supply range

Table 2.2.1: Power supply range

Parameter	Min.	Typical	Max.	Unit
Device operating input voltage	4.80	5.00	6.00	V

2.3.2 Power consumption

Table 2.2.2: Working current

Mode	Condition	Min	Max
Active-Mode (RX)	TX disabled; RX enabled.	33mA	40mA
Active-Mode (TX)	TX power @SF12, 22dbm	190mA	200mA

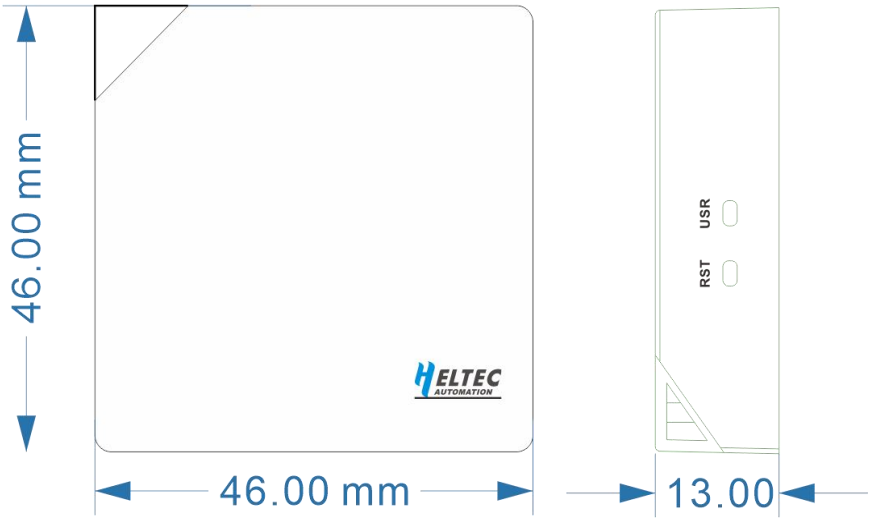
2.4 RF characteristics

The following table gives typically sensitivity level of the HT-M00S Indoor LoRa Gateway.

Table 2.4: LoRa RF characteristics

Signal Bandwidth/[KHz]	Spreading Factor	Sensitivity/[dBm]
125	SF12	-134
125	SF11	-132
125	SF10	-130
125	SF9	-127
125	SF8	-124
125	SF7	-122

3. Physical Dimensions



4. Resource

4.1 Relevant resource

- Heltec LoRaWAN test server based on TTS V3:https://lora.heltec.org/
- HT-M00S Documents Page:

  https://docs.heltec.org/en/gateway/ht-m00s/index.html

4.2 Heltec Contact Information

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