



## The Things Indoor LoRaWAN WiFi Gateway – 8 Channel LoRa 900 MHz

PRODUCT ID: 4345

Meet the affordable 8 Channel LoRa gateway from TTN, The Things Indoor Gateway! Simple name for a straight-to-the point product. It's the new low cost, *indoor* multi-channel LoRaWAN gateway [designed by The Things Network](#), so you know [it will work perfectly with TTN](#). Make a free account, plug it in, follow the easy step-by-step installation instructions and you've got yourself a LoRaWAN to Internet gateway in under 5 minutes. No setup or usage fees.

A huge boon to the global IoT community, the Gateway can connect any kind of digital sensor to a homegrown app using the LoRaWAN protocol. Teams in several cities have begun work to launch their own local networks and platforms, ranging from temperature sensors for food storage or alerts when trash cans need emptying. The possibilities are endless, and now you can even join in and help add coverage in your neighborhood. (Of course, you can set it up for non-public usage, but it's more fun when you share!)

This handheld-sized base station is your LoRaWAN (Long Range Wide-area Network) router to connect your devices to the Internet of Things. It's plug and play. Activate your gateway in just 5 minutes to create your own local network. This version operates at 902-928MHz and has a 2-prong 120V plug for use in the US.

Features:

- 8 channel LoRaWAN indoor gateway
- One of the first gateways to support the state-of-the-art [BasicStation](#) Protocol
- Supports LBT
- Simple setup steps taking lesser than 5 mins
- Can connect to any network backend of choice
- Setup and Connectivity over WiFi
- Can be powered up via a USB-C cable or via an elegant snap-in connector to a wall outlet
- Built-in omnidirectional antenna for indoor use
- Security via a range of [modes](#)
- DHCP WiFi setup (note you cannot use a fixed IP address)

[Check out our LoRa guides for using any of our development boards with TTN gateways.](#)

# TECHNICAL DETAILS

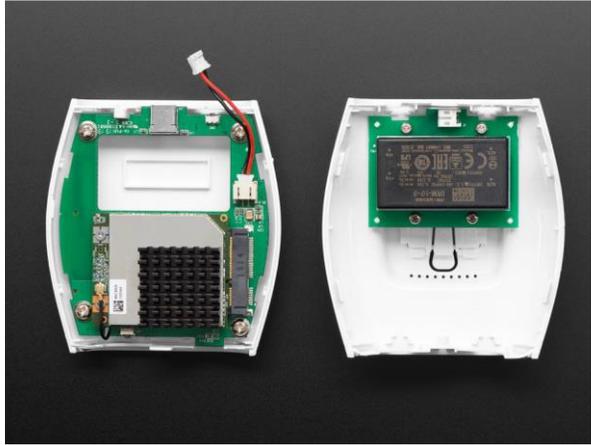
## Specs:

- Model: TBMH100
- [The Things Network Documentation](#)
- SoC – Espressif System ESP8266 WiSoC
- Wireless Connectivity
  - 802.11 b/g/n WiFi 4 via ESP8266 + PCB antenna
  - LoRaWAN via [Semtech 1308](#) chipset with
    - Support for 915 MHz (US) bands and 868 MHz (EU).
    - 8-channel support
    - Integrated antenna
    - Up to -139dBm sensitivity with SX1257 or SX1255 Tx/Rx front-end
    - 70dB CW interferer rejection at 1MHz offset
    - Able to operate with negative SNR
      - CCR up to 9dB
    - Emulates 49x LoRa demodulators and 1x (G)FSK demodulator
    - Dual digital Tx & Rx radio front-end interfaces
    - 10 programmable parallel demodulation paths
    - Dynamic data-rate adaptation (ADR)
    - True antenna diversity or simultaneous dual-band operation
- Misc – Setup & Reset buttons
- Power Supply
  - Built-in 110-220VAC 50-60Hz power supply with US plug
  - USB type-C port (900 mA)
- Input: 5V~1A
- Output: 5V~0.5A

Product Dimensions: 80.0mm x 80.0mm x 40.0mm / 3.1" x 3.1" x 1.6"

Product Weight: 145.0g / 5.1oz





<https://www.adafruit.com/product/4345/4339/9-10-19>