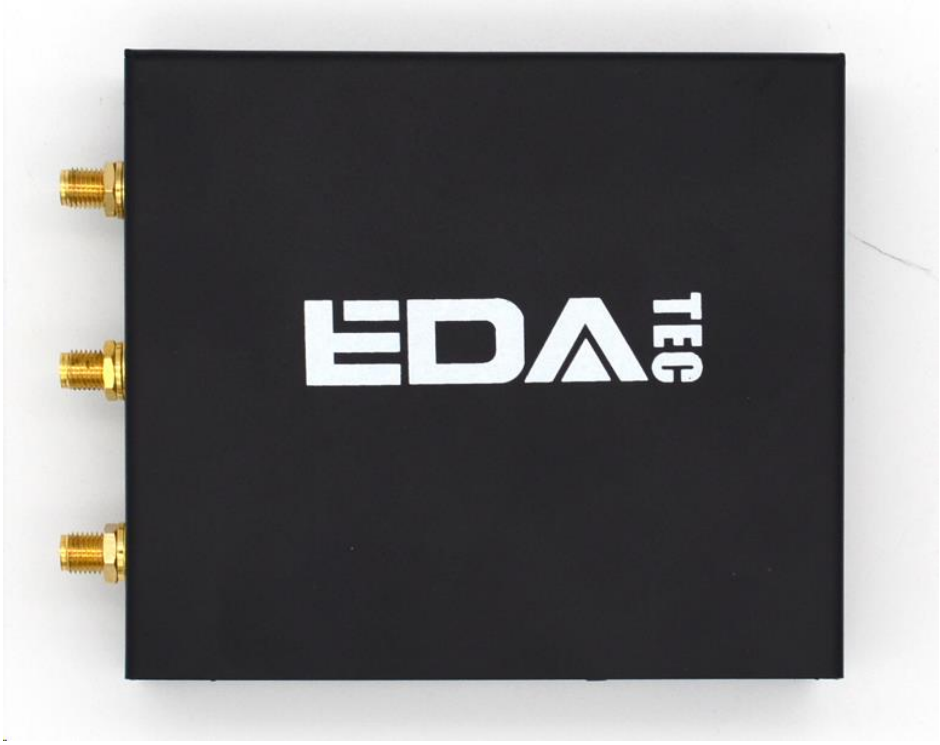
ED-IOTHOTSPOT-PI02 REV1.0

INDOOR LIGHT HOTSPOT, POWERED BY HELIUM

INSTALL AT HOME AND GET HNT REWARDS

2022-03-12

EDA TECHNOLOGY CO.,LTD



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Revision History

Date	Version	Description	Note
2022-03-22	Draft	Initial release.	

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Chapter 1 Overview

ED-IoTHotspot-Pi02 is a Helium Indoor Light Hotspot designed by EDATEC. By deploying it at your home or office, you can provide your city with miles of low-power network coverage for billions of devices and earn a new cryptocurrency, HNT.

POWERED BY HELIUM

Helium is a global, distributed network of Hotspots that create public, long-range wireless coverage for LoRaWAN-enabled IoT devices. Hotspots produce and are compensated in HNT, the native cryptocurrency of the Helium blockchain. The Helium blockchain is a new, open source, public blockchain created entirely to incentivize the creation of physical, decentralized wireless networks. Today, the Helium blockchain, and its hundreds of thousands of Hotspots, provide access to the largest LoRaWAN Network in the world.

POWERED BY HELIUM LONGFI

Helium LongFi is a technology architecture that combines a leading wireless technology, LoRaWAN, and the Helium Blockchain. LongFi is optimized for miles of range, and long battery life for IoT devices

REMOTE MANAGEMENT AND DIAGNOSTIC

- Easily manage Hotspots and tokens from the Helium official mobile app
- Built-in Dashboard for remote management, remote diagnostic, firmware upgrades accessed in LAN
- OTA support – Automatic OTA upgrades to do self diagnostic and make the firmware always latest to miner more HNT

OPTIMIZED FOR INDOOR USE

- WiFi with external antenna for better network access
- Multiple Optional LoRa antenna - 2.5dBi / 5.8dBi
- Silent - Efficient cooling system. No fan needed
- Low power - Uses as much power as a broadband router(12W)

FREQUENCY SELECTION

The ED-IoTHotspot-Pi02 comes in 3 different frequency variants:

- 868 MHz (EU868, IN865, RU864) - this is suitable for EU, India, Russia and a variety of other countries.
- 915 MHz (US915, AU915, KR920, AS923-1/2/3) - this is suitable for USA, Australia, New Zealand and lots of countries in South America and Asia.

1.1 Features

- Compatible with Helium LongFi™ to earn HNT
- Wider Coverage
  - Semtech SX1303 + SX1250 concentrator with wide range of coverage and low-power consumption
- High Performance
  - Quad-core, 1GHz ARM Cortex-A53 64-bit CPU, 512M SDRAM, 8GB storage
- Connectivity
  - Ethernet
  - WiFi and Bluetooth 4.2 with external antenna
  - GPS
- Frequency Plans
  - model 868 MHz (EU868, RU864)
  - model 915 MHz (US915, AS923-1/2/3, AU915)
- Multi Antenna Options
  - Standard 2.5dBi antenna
  - Optional 2.5dBi / 5.8dBi antenna
- Remote Management
  - Easily manage with Helium app on iOS and Android
  - Managing & diagnosing from Remote Access Dashboard in LAN
- Self Diagnostic & Repair
  - OTA support enables automatic online upgrades, without any activation or monitoring operation
- Certified with CE / FCC

1.2 Ordering Code

Code	Description
ED-IoTHotspot-Pi02-EU	868 MHz (EU868, IN865, RU864) - this is suitable for EU, India, Russia and a variety of other countries
ED-IoTHotspot-Pi02-US	915 MHz (US915, AU915, KR920, AS923-1/2/3) - this is suitable for USA, Australia, New Zealand and lots of countries in South America and Asia.

Chapter 2 Specification

Feature	Parameters
CPU	1GHz quad-core 64-bit Arm Cortex-A53 CPU
RAM	512MB
Storage	8GB micro SDCard
Ethernet	1x 10 / 100M Ethernet
WiFi / Bluetooth	2.4GHz 802.11 b/g/n wireless LAN, Bluetooth 4.2, BLE, External Antenna
LoRa Concentrator	Semtech SX1303 + SX1250
Security	Built-in ATECC608A crypto device
Frequency Band Support	868 ~ 870 MHz (EU868, IN865, RU864)
	902 ~ 928 MHz (US915, AU915, KR920, AS923-1/2/3)
Sensitivity	-125dBm @125KHz/SF7
	-139dBm @125KHz/SF12
TX Power	Up to 27dBm
Antenna	1x WiFi / BT external Antenna
	1x 2.5dBi LoRa Antenna
	Optional 5.8dBi LoRa Antenna
LED Indicator	1x RGB LED
Button	1x Button for Hotspot Configuration
Power In	DC 7.5 V ~ 18V
Operating Temperature	0°C to 50°C
Relative Humidity	0% - 90%
Heat Dissipation	Aluminum enclosure
Dimension	95mm(L) x 95mm(W) x 26mm(H)
Certification	CE / FCC
Helium Official App Support	Yes
Remote Management Dashboard	Yes, Dashboard developed by EDATEC
OTA Support	Yes

Chapter 3 Contact

- Email – sales@edatec.cn / support@edatec.cn
- Mobile – +86-18621560183
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3.1 About EDATEC

EDA Technology Co.,Ltd is located in Shanghai, it is one of Raspberry Pi's Global Design Partners. Our vision is to offer the hardware solutions for IoT, Industrial Control, Automation, Green Energy & Artificial Intelligence solutions based on Raspberry Pi Technology platform.

We provide the standard hardware solution, custom design &manufacturing services that accelerate the electronic product development and time to market.

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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.