

MESHTASTIC

CATALOG

**TRANSCEIVERS ASSEMBLED IN HIGH
TEMPERATURE - HIGH IMPACT (PETG) CASES
MANY COLORS TO CHOOSE FROM**

FLASHED – ASSEMBLED - TESTED

READY TO OPERATE

**MAKE A DONATION TO RU PREPARED AND
GET AN AWARD**

June 2024

INFORMATION SECTION INCLUDED



**CALL (203) 671-2243
ASK FOR DAVE
kg7ncv@mail.com**

RU PREPARED DONATION CATEGORY AWARDS

Note: We are NOT selling Meshtastic units . We are giving awards based on donation levels!

- **AWARD CATEGORY 1 DONATION of \$135.00**
- **AWARD CATEGORY 2 DONATION of \$130.00**
- **AWARD CATEGORY 3 DONATION of \$ 90.00**
- **AWARD CATEGORY 4 DONATION of \$ 75.00**
- **AWARD CATEGORY 5 DONATION of \$ 65.00**
- **AWARD CATEGORY 6 DONATION of \$ 50.00**
- **AWARD CATEGORY 7 DONATION of \$ 45.00**
- **AWARD CATEGORY 8 DONATION of \$ 40.00**
- **AWARD CATEGORY 9 DONATION of \$ 35.00**
- **AWARD CATEGORY 10 DONATION of \$ 30.00**
- **AWARD CATEGORY 11 DONATION of \$ 25.00**
- **AWARD CATEGORY 12 DONATION of \$ 3.00**
- **AWARD CATEGORY 13 DONATION of \$ 2.00**

**NOTE: PROCEEDS WILL BE DEDICATED TO THE BUILDING OF OUR
RU PREPARED MESHTASTIC SYSTEM. MESHTASTIC FOR THE SAFETY OF ALL!**

T-DECK SECURE PETG CASE

AWARD CATEGORY 1



T-DECK

SPECIFICATIONS



T-DECK

BOARD FUNCTION



T-DECK

SPECIFICATIONS

MCU: ESP32-S3FN16R8 Dual-core LX7 microprocessor

Wireless Connectivity: 2.4 GHz Wi-Fi & Bluetooth 5 (LE)

Development : Arduino, PlatformIO-IDE, Micropython

Flash: 16MB

PSRAM: 8MB

Battery ADC PIN: IO04

Onboard functions: Trackball, Microphone, Speaker

2.8 inch ST7789 SPI Interface IPS

LCD: Resolution: 320 x 240 Full viewing angle

SX1262 LoRa Transceiver

T-BEAM SUPREME SECURE PETG CASE

WITH CLIP

AWARD CATEGORY 2



T-BEAM SUPREME

GPS – ALTITUDE – TEMPERATURE – HUMIDITY - BAROMETRIC PRESSURE



MCU

ESP32-S3FN8 Dual-core LX7
microprocessor

Wireless Connectivity

2.4 GHz Wi-Fi & Bluetooth5 (LE)

Development

Arduino, PlatformIO-IDE, Micropython

Onboard functions

Boot (IO00) + Reset + Power Button

Flash

8MB

PSRAM

8MB

T-BEAM SUPREME

T-Beam	Supreme
First appearance	2023
SoC	ESP32-S3
LF clock source	32K XTAL
Flash memory	8 MB
PSRAM	8 MB
Wi-Fi	802.11 b/g/n
Bluetooth	5 LE only
sub-1GHz radio	SX1262
PMU	AXP2101
Battery	18650 Li-Ion
GNSS	Ublox M10
Display	built-in 1.3" OLED
USB	2.0 FS Client/Host
Air pressure sensor	BME280 ²
IMU	QMI8658
Magnetometer	QMC6310
RTC	PCF8563
Card	micro-SD (<i>SPI only</i>)

HELTEC V3 LORA32 DEVICE

RAW BOARD 915MHz & IPX to SMA CABLE

AWARD CATEGORY 9



HELTEC V3 LORA32 DEVICE

RAW BOARD 915MHz

- **WiFi LoRa 32 is a classic IoT (Internet of Things) development board designed & produced by Heltec Automation.**
- **This (no frills) board is the backbone of many LoRa **Meshtastic** systems.**
- **We utilize this board for the “BNDR” and “NBLR” Case Systems listed below.**
- **The newly launched V3 version has the same pin sequence as the V2 version and retains Wi-Fi, Bluetooth, LoRa, OLED display, and other functions.**

HELTEC V3 LORA32 DEVICE

RAW BOARD 915MHz

SPECIFICATIONS

System	<i>WiFi LoRa 32 (V2)</i>	WiFi LoRa 32 (V3)
MCU	<i>ESP32-D0</i>	ESP32-S3
LoRa Node Chip	<i>SX1276</i>	SX1262
USB Socket	<i>Micro USB</i>	USB Type C
Crystal Oscillator	<i>Ordinary crystal oscillator</i>	High precision temperature compensated crystal oscillator
Low Power Features in Deep Sleep	<i>≈800uA</i>	<10uA
Other Update		Better impedance matching of RF circuits.

HELTEC V3 PETG BNDR CASE

AWARD CATEGORY 5



HELTEC V3 PETG BNDR CASE

SPECIFICATIONS

Printed in PETG High Temperature – High Impact Material (Suitable for AZ)

915MHz LoRa Antenna Indoor 3dBi Gain Omni SMA Male

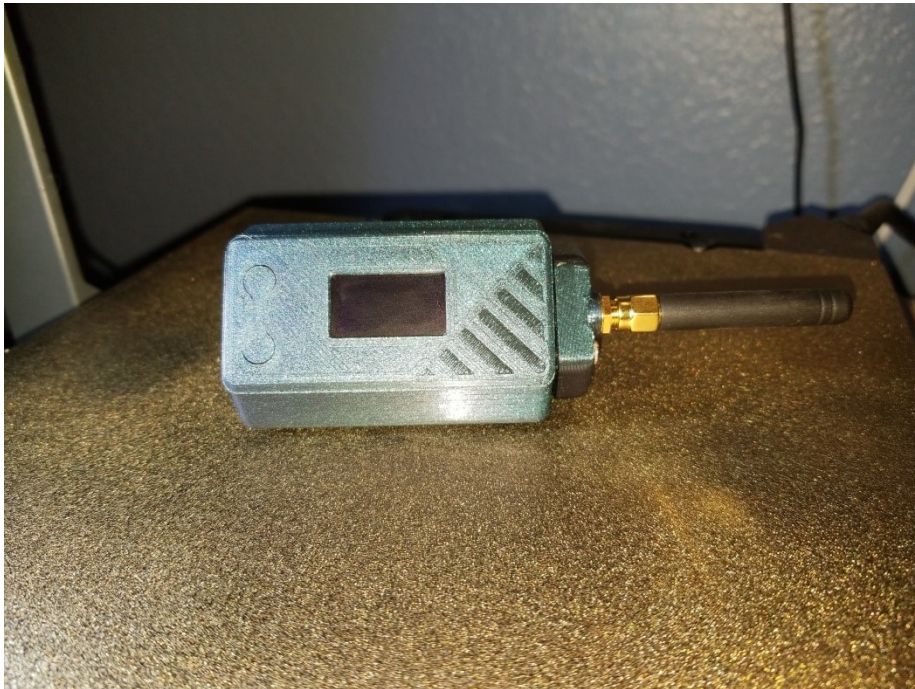
SMA Male to IPX RG-178 COAX

18650 BATTERY CASE with Micro JST 1.25 Plug

18650 BATTERY 9900MAh

HELTEC V3 PETG NBLR CASE

AWARD CATEGORY 4



HELTEC V3 PETG NBLR CASE

SPECIFICATIONS

Printed in PETG High Temperature – High Impact Material (Suitable for AZ)

915MHz LoRa Antenna Indoor 1dBi Gain Omni SMA Male

SMA Male to IPX RG-178 COAX

2000MAh Lithium Battery

HELTEC V3 H1 PETG PAGER STYLE CASE

AWARD CATEGORY 6



HELTEC V3 H1 PETG PAGER STYLE CASE

SPECIFICATIONS

Printed in PETG High Temperature – High Impact Material (Suitable for AZ)

915MHz LoRa Antenna Indoor 2dBi Gain Omni SMA Male

SMA Male to IPX RG-178 COAX

LILYGO T3S3 LORA32 PETG SECURE STYLE CASE

AWARD CATEGORY 6



LILYGO LORA32 PETG SECURE STYLE CASE

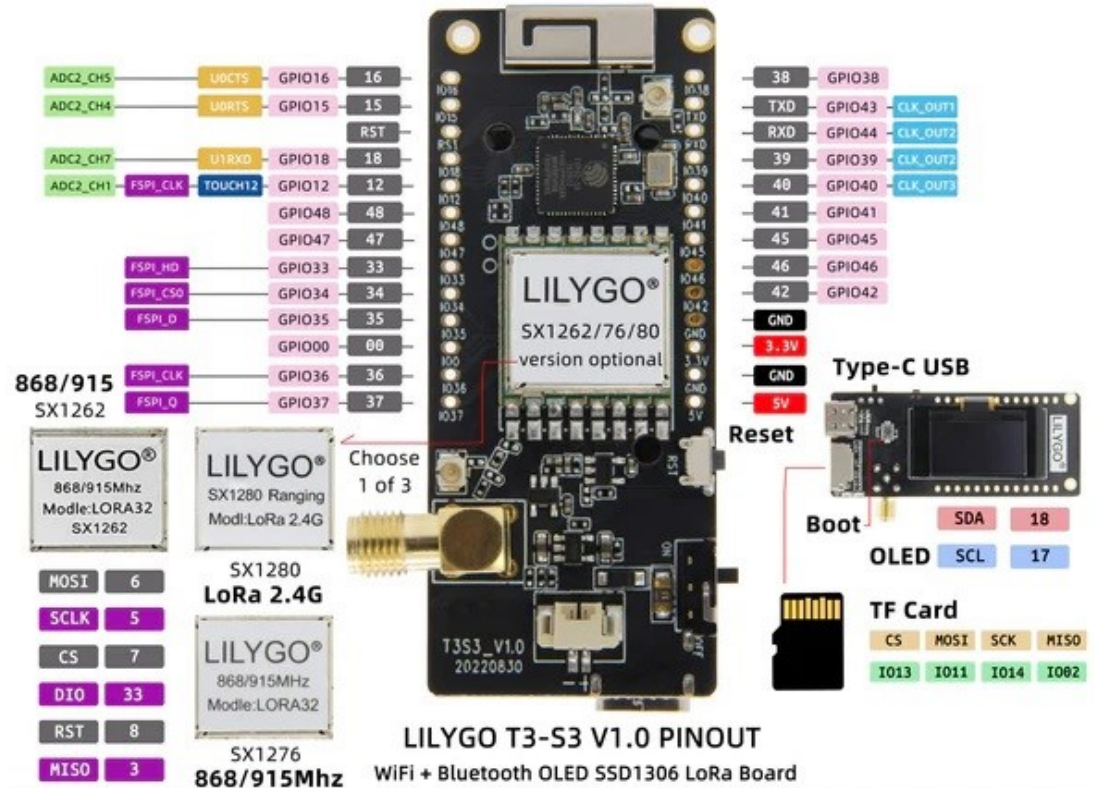
SPECIFICATIONS

ESP32-S3 LoRa SX1276

915Mhz Development Board

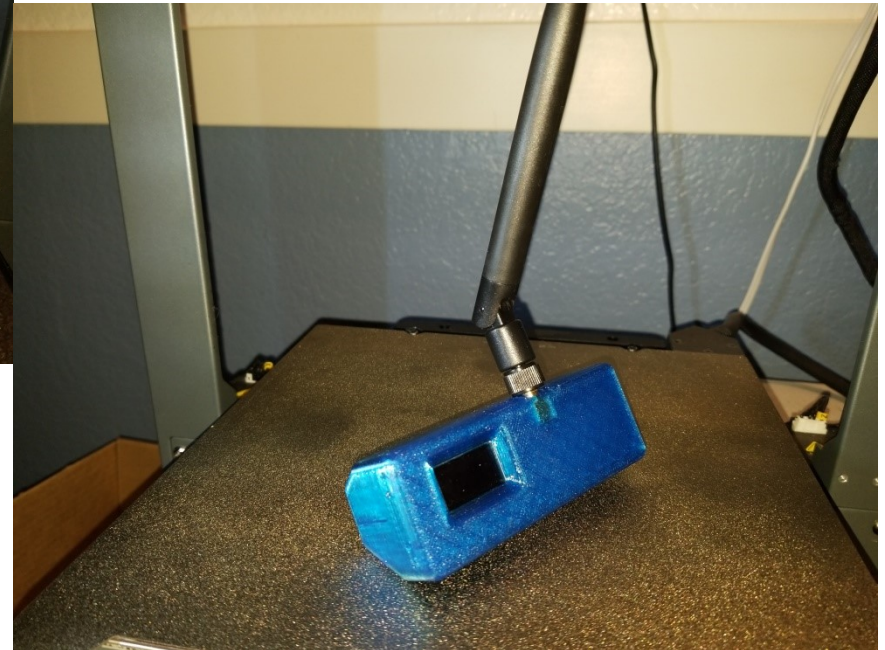
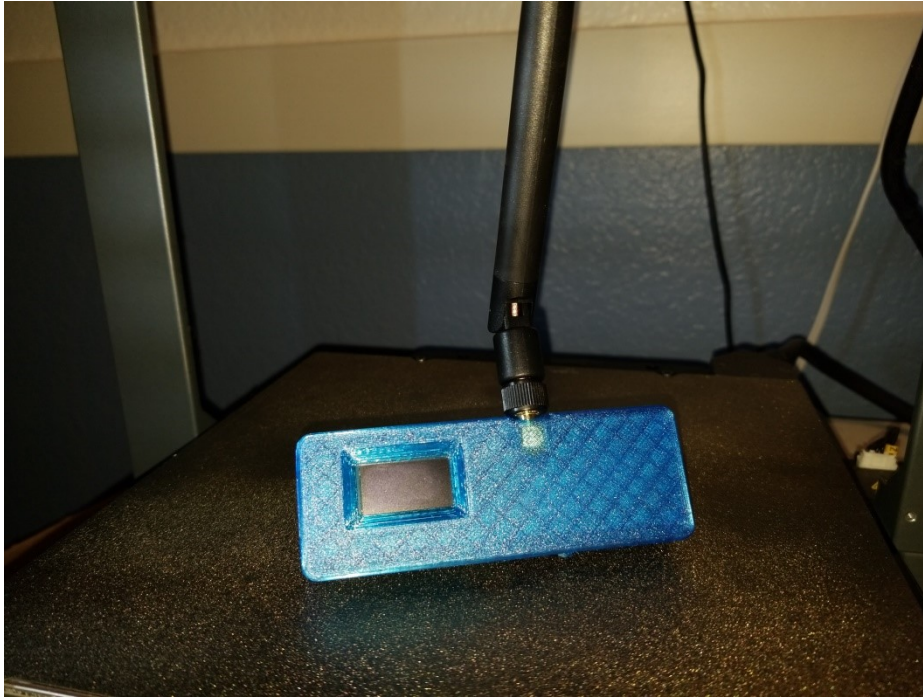
1100mAh Lithium Battery

Micro SD Card Ready



LILYGO T-BEAM PETG SECURE STYLE CASE

AWARD CATEGORY 3



T-BEAM

SPECIFICATIONS

GPS – ALTITUDE

MCU	ESP32
Flash	4MB
PSRAM	8MB
Serial Chip	CH9102
Wireless protocol	Wi-Fi + Bluetooth 4.2
PMU	AXP2101
Onboard functions	3 Buttons (Power+IO38+Reset)
Antenna	<ul style="list-style-type: none">•3D WiFi Antenna [Use by default]•LoRa antenna•GPS ceramic antenna
Battery	<ul style="list-style-type: none">•18650 9900mAh Battery Installed

T-BEAM

SPECIFICATIONS

GPS

NEO-6M GPS Modules: Support GPS protocol
Onboard RTC crystal, Support interrupt/ wakeup

LoRa

Long Range Low Power LoRa Transceiver
High sensitivity: -148dBm
Transceiver rate: 300 kbps
SX1276[868/915/923Mhz]

Display Details

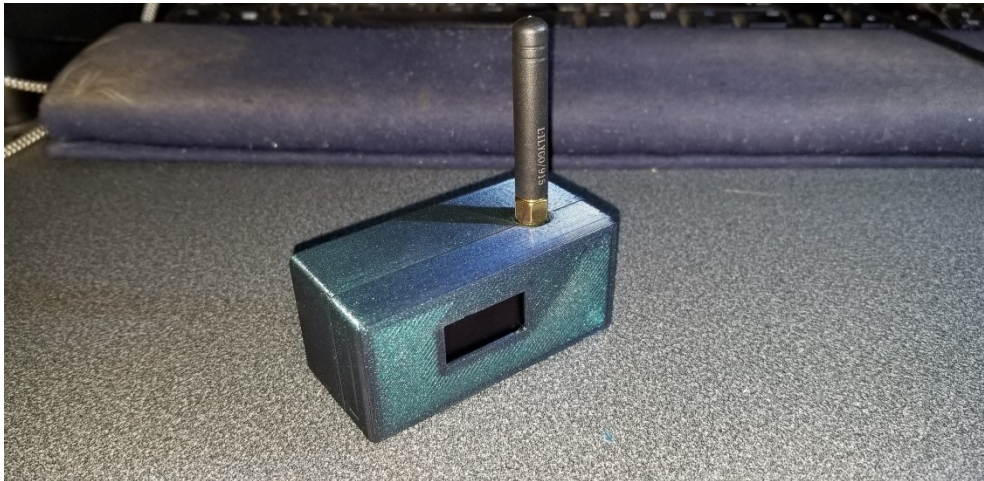
OLED: 0.96 inch
Driver: SSD1306

Software: Meshtastic

Power Supply Mode: Supports USB Micro/18650 battery holder
USB can power the battery

HELTEC T3S3 PETG SNAP BOX

AWARD CATEGORY 5



HELTEC T3S3

SPECIFICATIONS

Printed in PETG High Temperature – High Impact Material (Suitable for AZ)

915MHz LoRa Antenna Indoor 1dBi Gain Omni SMA Male

Micro SD Card Ready

HELTEC GPS TRACKER SECURE CASE

AWARD CATEGORY 4



HELTEC TRACKER PETG SECURE CASE

SPECIFICATIONS



HELTEC TRACKER PETG SECURE CASE

SUMMARY

- **Wireless Tracker is a development kit based on ESP32-S3FN8.**
- **It integrates both SX1262 and UC6580 to provide fast GNSS solution for IoT.**
- **It can track any object and then upload that data wirelessly by Wi-Fi, Bluetooth, LoRa, and has been widely used in [Meshtastic](#).**
- **Wireless Tracker supports L1 + L5/L2, and supports GPS, GLONASS, BDS, Galileo, NAVIC, QZSS multi-system joint positioning.**
- **It is perfectly compatible with Arduino, can be widely used in development such as bicycle sharing services, tracking pets or livestock, locating vehicles, tracking children, etc.**

HELTEC TRACKER PETG SECURE CASE

MAIN FEATURES

- **ESP32-S3FN8+SX1262+UC6580 Chipset, supports Wi-Fi, LoRa, Bluetooth, GNSS.**
- **Low power design of dual-frequency multi-system based on 22nm technology.**
- **Supports L1 + L5/L2, supports GPS, GLONASS, BDS, Galileo, NAVIC, QZSS multi-system joint positioning.**
- **Type-C USB interface with a complete voltage regulator, ESD protection, short circuit protection, RF shielding, and other protection measures.**
- **Onboard SH1.25-2 battery interface, integrated lithium battery management system (charge and discharge management, overcharge protection, battery power detection, USB / battery power automatic switching).**
- **Onboard Wi-Fi, Bluetooth dedicated 2.4GHz metal spring antenna, reserved IPEX (U.FL) interface for LoRa and GNSS use.**
- **Onboard 0.96-inch 160*80 dot matrix LCD display, which can be used to display debugging information, battery power, and other information.**
- **Support the Arduino development environment.**

HELTEC TRACKER PETG SECURE CASE

Specifications

Parameters	Description
Master Chip	ESP32-S3FN8 (Xtensa®32-bit lx7 dual core processor)
LoRa Chipset	SX1262
GNSS Chipset	UC6580
Frequency	863~928MHz
Max. TX Power	21±1dBm
Max. Receiving Sensitivity	-134dBm
Wi-Fi	802.11 b/g/n, up to 150Mbps
Bluetooth LE	Bluetooth 5, Bluetooth mesh
Hardware Resource	7*ADC1 + 2*ADC2; 7*Touch; 3*UART; 2*I2C; 2*SPI; etc.
Interface	Type-C USB; 2*1.25 lithium battery interface; LoRa ANT(IPEX1.0); 2*18*2.54 Header Pin
Battery	3.7V lithium battery power supply and charging
Operating Temperature	-20 ~ 70 °C
Dimensions	65.48 * 28.06* 13.52mm

HELTEC WIRELESS PAPER PETG SECURE CASE

AWARD CATEGORY 6



HELTEC WIRELESS PAPER

4 TIMES THE SCREEN SIZE OF MOST OTHER MESHASTIC DEVICES

SUPER EFFICIENT BATTERY USE



HELTEC WIRELESS PAPER SECURE CASE

SPECIFICATIONS

Parameters	Description
MCU	ESP32-S3FN8
LoRa Chipset	SX1262
Frequency	863~928MHz
Power Supply	lithium battery, USB Type-C
Supply Voltage	3~5v
Operating Temperature	0~50°C
Operating Humidity	35~70%
Display Resolution	122(H)x250(V) Pixel
Connection Method	Wi-Fi, LoRa,BLE
Screen Size	2.13 Inch
Active Area	23.705×48.55
Pixel Pitch	0.1942X0.1942
Pixel Configuration	Square

MESHTASTIC SOLAR PRODUCTS

AWARD CATEGORY 7

SOLAR PANEL

PERFECT FOR MESHTASTIC
REMOTE INSTALLATIONS

5 VOLT DC

6000mAh Integrated Battery Pack

USB-C and Micro USB connectors



MISC PRODUCTS

AWARD CATEGORY 10

RU PREPARED MESHTASTIC T-SHIRTS

BLACK ONLY FOR NOW

SIZES: SM – MED – LG – XL - XXL

STANDARD AND V-NECKS AVAILABLE

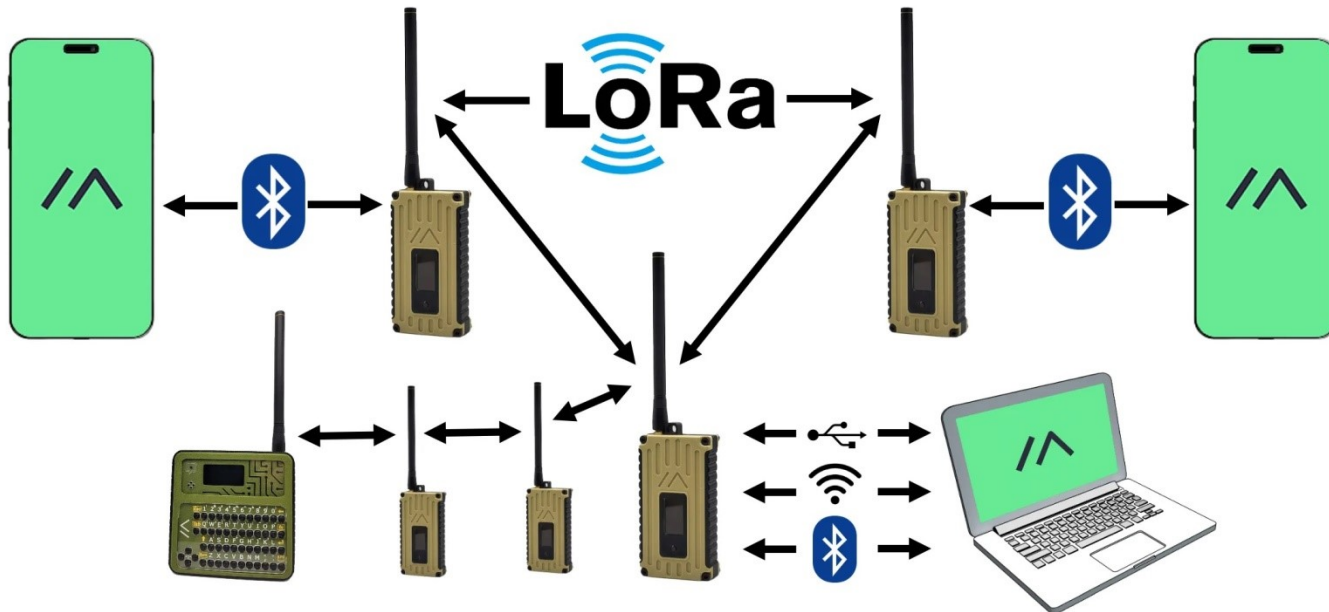


OUR MISSION

TO PROVIDE OUR RU PREPARED MEMBERS AND CITIZENS THE SIMPLIST AND MOST DURABLE DEVICES, FOR “SHFT” **MESHTASTIC** MESSAGING COMMUNICATIONS!

MESHTASTIC® IS A PROJECT THAT ENABLES YOU TO USE INEXPENSIVE LORA RADIOS AS A LONG RANGE OFF-GRID COMMUNICATION PLATFORM IN AREAS WITHOUT EXISTING OR RELIABLE COMMUNICATIONS INFRASTRUCTURE.

THIS PROJECT IS 100% COMMUNITY DRIVEN AND OPEN SOURCE!



WHY MESTASTIC?

- **NO LICENSE REQUIRED**
- **Long range: 157 MILES** ([*Record by kboxlabs*](#))
- **NO phone service or WiFi required for mesh communication**
- **Decentralized communication - No dedicated router required**
- **Encrypted communication**
- **Spread Spectrum Channel Hopping Style Security**
- **Compatible with I-Phone and Android Devices**
- **Send and receive text messages between members of the mesh**
- **Optional GPS based location features**

HOW MESTASTIC WORKS

When you send a message on your **Meshtastic** companion app, it is relayed to the radio using Bluetooth, Wi-Fi/Ethernet or serial connection. That message is then broadcasted by the radio. If it hasn't received a confirmation from any other device after a certain timeout, it will retransmit the message up to three times.

When a receiving radio captures a packet, it checks to see if it has heard that message before. If it has it ignores the message. If it hasn't heard the message, it will rebroadcast it. For each message a radio rebroadcasts, it marks the "hop limit" down by one. When a radio receives a packet with a hop limit of zero, it will not rebroadcast the message.

The radio will store a small amount of packets (around 30) in its memory for when it's not connected to a client app. If it's full, it will replace the oldest packets with newly incoming text messages only.

North America Frequency Band is 915 MHz (ISM Band)

The maximum output power for North America is +30 dBm ERP ([Effective Radiated Power](#)).

The band range is from 902 to 928 MHz. There are 104 frequency slots defined with the standard radio preset LongFast. After factory reset the radio will be set to frequency slot 20 with a center frequency of 906.875 MHz.

MISC PRODUCTS

AWARD CATEGORY 10

Baofeng UV-5RIII Tri-Band Amateur Radio

Completely programmed with the 128 RU Prepared Frequencies

The UV-5RIII Tri-Band is able to Transmit on
Narrowband (12.5kHz) and Wideband (25kHz).

Tri-Band Radio:

136-174mhz (VHF)

220-260mhz

400-520.99mhz (UHF)

Listen to FM Broadcast Stations

Supports CTCSS, DCS, and DTMF

Flashlight

CHIRP programming compatible



MISC PRODUCTS

AWARD CATEGORY 11

Baofeng UV-5R “Family of Radios” Accessory Bundles

Bundle Includes the following items:

- HIGH CAPACITY BATTERY
- EXTERNAL MICROPHONE with SPEAKER
- HIGHER GAIN ANTENNA UPGRADE
- RU Prepared 128 channel programmed CHIRP file



MISC PRODUCTS

AWARD CATEGORY 13

**BAOFENG UV5R & QUANSHENG K-SERIES
NON-TIP HT BASES FOR THOSE LONG ANTENNAS AND
TALL EXTENDED BATTERYS
DIFFERENT COLORS AVAILABLE**



RU PREPARED HAM NET

- **WEDNESDAY EVENINGS AT 7:00pm (1900Hrs)**
- **USERY 1 REPEATER 447.650 (-) PI 186.2**
- **COVERING ALL FACITS OF COMMUNICATION**
- **MANY PREPAREDNESS TOPICS COVERED**
 - **WATER – FOOD STORAGE - SHELTER**
 - **PERSONAL PROTECTION**
 - **MEDICAL**
 - **COMMUNICATIONS**
 - **SOLAR and much more!**

RU PREPARED DONATION CATEGORY AWARDS

Note: We are NOT selling Meshtastic units . We are giving awards based on donation categories!

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