



Personal Mesh Node Radio (RNode Firmware)



The **Personal Mesh Node Radio** is a rugged companion node transceiver for mesh network connectivity, housing Heltec Automation's **WiFi LoRa Node V3** based on the Semtech® SX1262 LoRa® chip and factory pre-loaded with the latest **Reticulum RNode firmware**. Interact via smartphone or Win/Mac/Linux PC using WiFi, Bluetooth LE, or USB (*USB-A/C cable included*). Powers from any external 5V/2A source including smartphones or power banks (*not included*).

Features:

- **Radio.** Heltec Automation Wifi LoRa 32 V3 Node. Max TX 21±dBm, max RX sensitivity -134dBm@SF12/BW=125KHz. WiFi 802.11b/g/b, Bluetooth 5 (LE). 470~510Mhz and 863~928MHz.
- **Firmware.** Factory loaded with latest WhisperOS firmware; trivial to re-flash to others.
- **Antenna.** Rigid factory-tested 915Mhz 1/4λ (SMA connection).
- **Case.** Rugged plastic with user buttons and cyan OLED display.

Applications:

- Industrial sensor telemetry and equipment monitoring.
- Field reconnaissance and situational awareness.
- Off-grid team communications and GPS tracking.
- Search-and-rescue and emergency response.
- Agricultural and environmental monitoring.
- SCADA mesh extension and asset tracking.
- Wilderness safety and backcountry messaging.
- Event and festival staff coordination.

Resources:

- ↗ [RNode Firmware Web Documentation](#)
- 📄 [Reticulum Network Stack PDF](#)
- ↗ [Heltec LoRa 32 V3 Web Documentation](#)
- 📄 [Heltec LoRa 32 V3 PDF Datasheet](#)
- 📄 [Semtech SX1261/2 PDF Datasheet](#)

Availability:

- Production samples of SKU-VOSGES-MNC01-G0-RN are available from the Project Tarn [Sample Store](#).
- The SKU-VOSGES-MNC01-G0-RN design is available for licensing – exclusive or non-exclusive manufacturing and distribution licenses are available; please contact licensing@tarn.parts for more information.

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