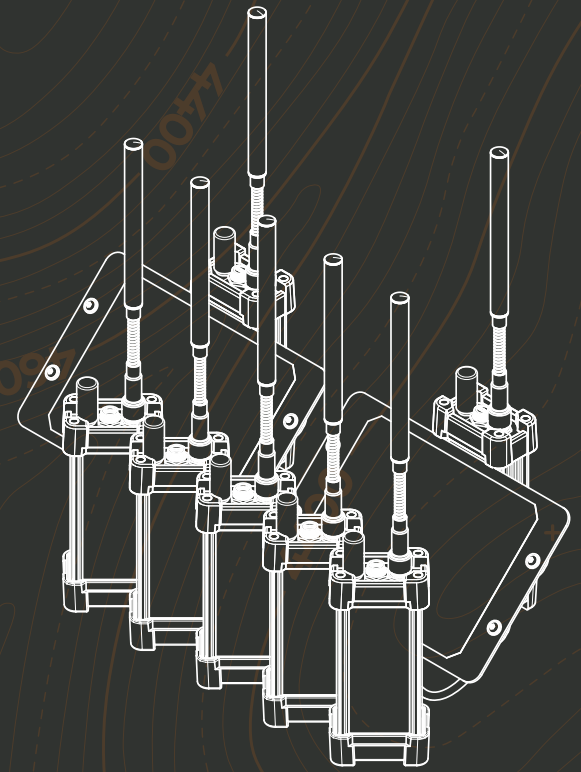


The RM-1 Radio

Filtered 1W. Encrypted. License-free.

Field-tested during Hurricane Helene recovery efforts.

Mount one on a fence post with a solar panel and it holds a node in the field for weeks. Carry one in a radio pouch and every teammate has a position on the map and a text channel. It works with any Meshtastic nodes already in the area, so every node your team places extends the local mesh.



1W filtered LoRa,
license-free

50mi max line-of-sight,
favorable terrain

30 days max as
infrastructure

KEY SPECS

- **Output**
True, filtered 1W LoRa from a custom AT Labs board: the legal limit for unlicensed, encrypted comms. No callsign needed.
- **Range**
Up to 50 miles line-of-sight in favorable terrain.
- **Battery**
10,000 mAh Li-ion. 5-15 days portable, up to 30 days as infrastructure, depending on radio and GPS configuration.
- **Housing**
All-aluminum, rubber bumpers. Charges 0 to 45C, discharges -20 to 60C.
- **Connectivity**
Bluetooth to phone or EUD. Waterproof USB-C, physical on/off switch.

VARIANTS

- **Portable** **\$545**
Fits a standard radio pouch. Active helical GNSS antenna holds location in any orientation.
- **Infrastructure** **\$595**
Ships with mounting brackets and a solar panel. Stainless supports rated for 100 mph winds. External Bluetooth antenna. Runs indefinitely on solar, conditions dependent.
- **Infra + upgraded antenna** **\$620**
Infrastructure with the upgraded antenna.

ECOSYSTEM COMPATIBILITY

- **Firmware**
868/915 MHz ISM. Meshtastic (default), MeshCore, Reticulum. Community ATAK plugins add tactical roles.
- **RM-2**
Shares a mesh with the RM-2. All RM-1 accessories work on the RM-2.
- **SX-E Pouch**
By Swift Design & Textiles. Made in USA, built for the RM family.
- **Charging**
RC-1 Quick Charge Adapter ships standard: magnetic pogo-pin, 12V 2A, full charge in about 3 hours.

BUILT FOR

- **SAR teams** tracking people on a mesh they control.
- **Emergency management** placing solar nodes that hold for days.
- **Utilities and remote crews** checking in beyond cell coverage.
- **Prepared civilians** running an encrypted mesh.

PRICING

From \$545

Made-to-order
~8-week lead time

BUDGET-CONSTRAINED? FundingReach matches agencies and volunteer teams with applicable grants: funding.at-labs.tech/apply



Contact us to get a quote.

rob@constellationresponse.com

AT Labs hardware and software designed and built in Tennessee by Kenny Cornett - Offered through Constellation Response
MIL-STD-810H certification pending. Range and battery life depend on terrain, conditions, and configuration.