

# Meshcore

## Introduction

From  [Wikipedia](#):


MeshCore is an open-source mesh networking protocol and software platform designed for off-grid, low-power text communication using LoRa (Long Range) radio technology. The system enables decentralized, multi-hop wireless messaging without reliance on cellular networks or internet infrastructure.

Use cases include emergency and disaster communications, outdoor and remote activities, [...] and experimental and educational deployments of low-power mesh networking.

[It] is designed to [...] operate in unlicensed  [ISM frequency bands](#) such as 868 MHz and 915 MHz, depending on regional regulations.

The basic idea is that you get a small *companion device* that you pair to your cell phone via bluetooth, and via that device, you can text others or post public messages using the 915 MHz band, all without a special license.

## Getting Started

- Get a companion device like:
  - the *Wio Tracker L1 Pro* from [seeed studio](#) or from [Robot Shop](#)
  - : add other options here
- Flash the device with the latest [Meshcore Firmware](#) (using a chromium browser).
- Install the Meshcore app on your phone. ([Android](#), [iOS](#), [Web App](#), [NodeJS](#), [Python](#))
- Pair the device with your phone.
- Turn off Auto-Add Contacts

See [Scott Baker's article](#) for more information.

## More Advanced

- Install a repeater like the *SenseCAP Solar Node P1-Pro* from [seeed studio](#) or [RobotShop](#)
- Use an antenna like [this one](#), [this one](#) or [one of these](#).
- Install [sensors](#).

# List of Repeaters on the Coast

## VA7KRZ-Gibsons-RP1

<b>Location:</b>	Kitchen Window, Gibsons (49.414161, -123.515539)
<b>Equipment:</b>	Heltec V3 with a 5.8 dBi Antenna
<b>Orientation:</b>	Clear line-of-sight toward Richmond / Lower Mainland
<b>Sponsor:</b>	Adam, VA7KRZ
<b>Public Key:</b>	612826cd886fd45bc6ce607308d14a4cb77b49673042d9844bf54242df5e74d8

## VA7FI - SenseCap

<b>Location:</b>	Atop a 20 m tree in Roberts Creek
<b>Equipment:</b>	SenseCAP with stock antenna
<b>Sponsor:</b>	Patrick, VA7FI
<b>Public Key:</b>	0c0355ec37944b77d9599c72b74f6b875851481d64aac0c813854fc1726



Under Construction:

<b>Location:</b>	Roof, Gibsons (49.414161, -123.515539)
<b>Equipment:</b>	RAK19004 (power module), RAK19007 (Baseboard), RAK4631 (LoRaWAN module)

## VA7XES - Roberts Creek

<b>Location:</b>	Roberts Creek (49.449751, -123.653155)
<b>Equipment:</b>	?
<b>Sponsor:</b>	?
<b>Public Key:</b>	857d939db340af0eb7cb6ee4cdfc59aab02c66f1e76d14c318e4e541e2

## Sechelt\_P Bay

<b>Location:</b>	?
<b>Equipment:</b>	?
<b>Sponsor:</b>	Carly, VA7GYT
<b>Public Key:</b>	d7ed8f8f764ca63a4158108d3a24f6e6e8d83666f63aa094f2a206060b4304f



## SSAC-1

<b>Location:</b>	On roof of Sechelt Senior Activity Centre (49.4757, -123.7580)
<b>Equipment:</b>	SenseCAP Solar Node P1 Pro with  Antenna
<b>Sponsor:</b>	Larry, VA7LSP
<b>Public Key:</b>	6d0c25c320b6e6e0852084699ac2e8c5d8cd042c44380c55360059768b12c2



## Maps

- [Official MeshCore Node map](#)
- [Community generated map](#)
- [SWBC Map with links](#) by VE7KOD

## Tools

- [MeshCore Analyser](#)
- [Path Profiler](#)

## Resources

- Official MeshCore [Website](#) and [Github](#)
- [Youtube Presentation by Liam Cottle](#)
- [Scott Baker's Website](#)
- [Salish Mesh Website](#)
- [Forum](#)
- [MeshCore vs Meshtastic](#)
- [Channels vs Rooms vs DMs](#)