

Ikoka Stick

Overview

The **Ikoka Stick** is an ultra-compact stick-format LoRa node based on the XIAO nRF52840 or ESP32-S3. It ships in multiple TX power variants, making it equally suitable as a pocket companion or a high-power tower-mount repeater.

Variants & Power Options

Variant	TX Power	Typical Use
Standard	22 dBm (0.15 W)	Personal carry / compact node
1 W	30 dBm	Infrastructure repeater
2 W	33 dBm	High-power tower mount

Key Specifications

- **MCU:** XIAO nRF52840 or ESP32-S3
- **Radio:** E22-900M series (SX1262 compatible)
- **Form factor:** Compact stick - pocketable even at 2 W

Community Deployments

The Ikoka Stick is the basis of [CascadiaMesh's](#) "1 Watt Ikoka Box" build - one of the most replicated community deployment designs, used for high-density urban and suburban coverage nodes.

RF Filtering

In electrically noisy environments (near industrial equipment, dense urban RF, tower-share sites), pair the Ikoka Stick with the **Baymesh 910 MHz cavity filter (~\$90)**. The cavity filter suppresses out-of-band interference and protects the receiver, improving effective range in difficult RF

environments.

Target Use Cases

- High-power infrastructure repeaters requiring compact form factor
- Tower mount and rooftop deployments
- Community mesh backbone nodes

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