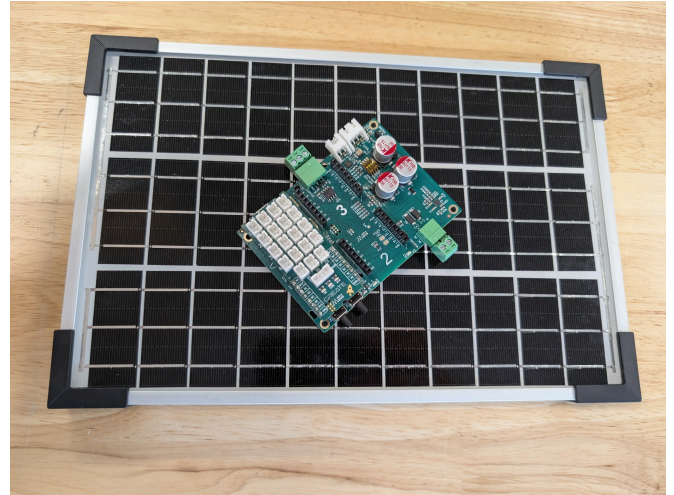


Introduction

The Firia Waypoint is a general purpose Industrial IoT device which provides a robust long-range wireless interface for a wide range of applications.



- SubGHZ mesh radio operation (Wi-SUN network compatible, EFR32FG25)
- 2.4GHz mesh radio operation (Thread / Matter compatible, EFR32MG24)
- Bluetooth (BLE) radio operation (Mobile device, asset tags, beacons)
- External antenna connection for SubGHz and (optional) 2.4GHz radios
- Internal antenna for 2.4GHz radio (BLE and Mesh)
 - Supports BLE 6 Channel Sounding (CS) - distance measurements
 - Optional external antenna for antenna diversity / range extension
- (3) MikroBus
- Environmental qualification from -40C to +85C
- DC power supply input with wide operating range (9-70VDC)
- Flexible battery charging system, with dynamic prioritization of system operation versus charge current - enables optimized operation directly from solar panels while charging cell arrangements of 1S, 2S, 4S, or 8S LiFePO4 batteries.
 - Custom builds can support LiPo, or Li-Ion chemistries.
- Battery heater output for extreme cold weather operation
- 2MB SPI flash for user data or alternate firmware images
- RS485 (Modbus) interface for multi-drop serial communication
- USB-C interface for local data and powering option
- (2) Onboard user buttons - software programmable
- (3) Onboard user LEDs - software programmable

Software Platform

The Waypoint is factory configured to connect to Firia's Horizon-XG IoT gateway via a Wi-SUN or OpenThread network.