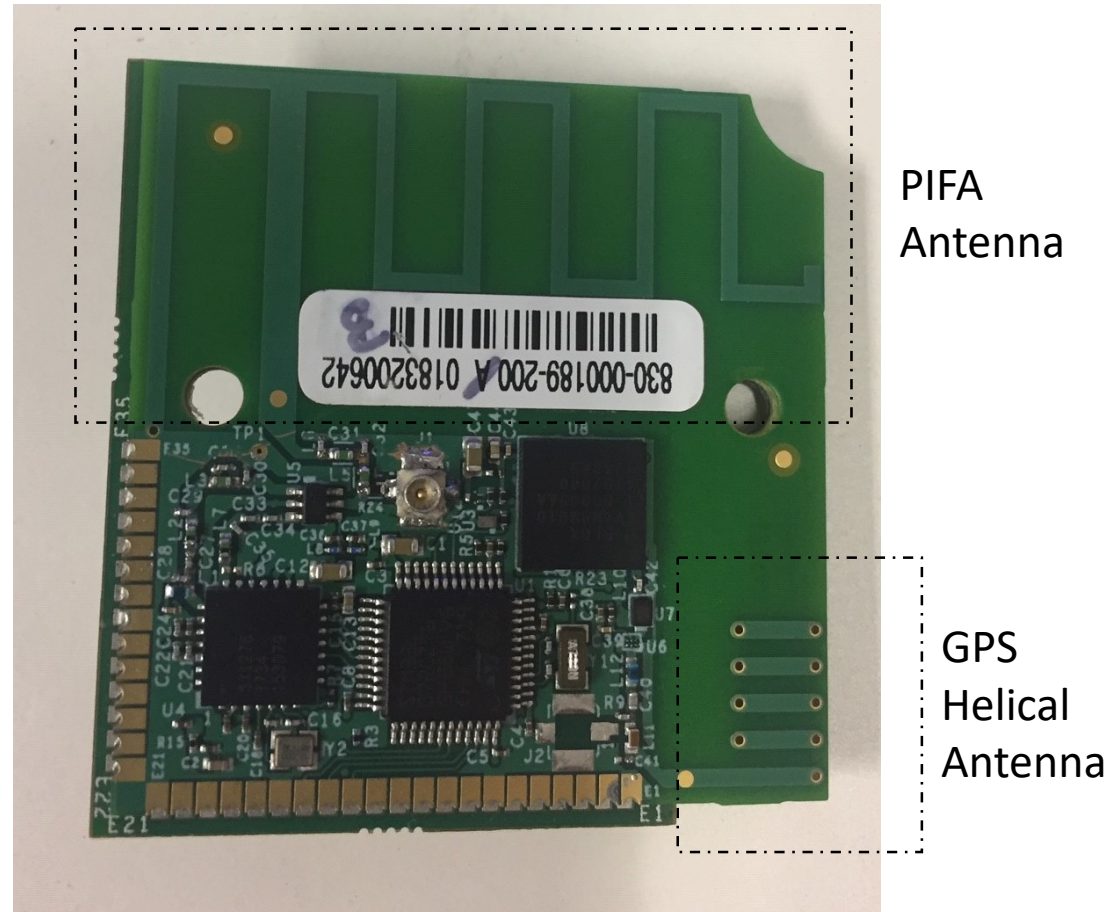


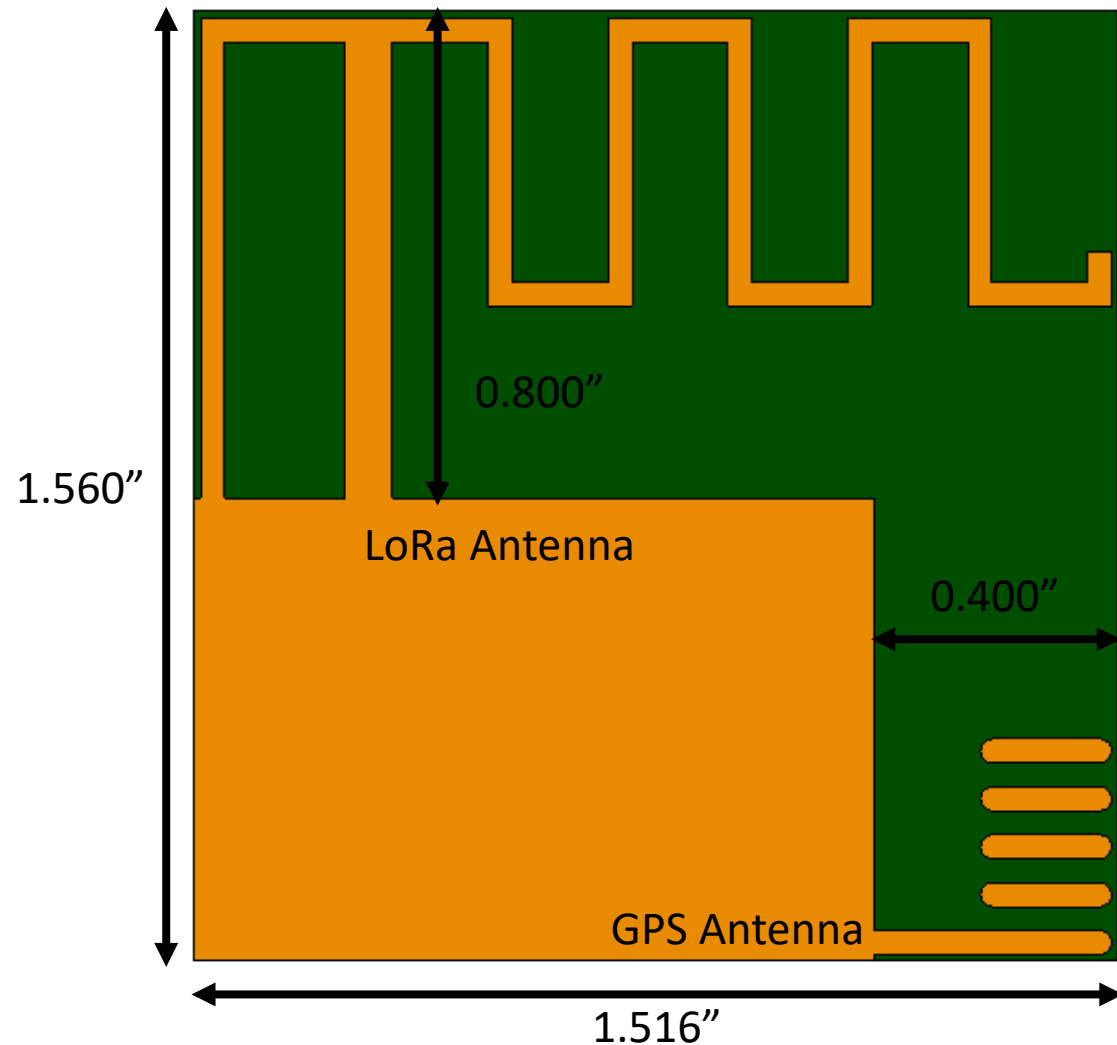
LoRa Module Antenna Data

- Type: Planar Inverted F Antenna (PIFA)
- Integrated on to PCB (See Figure 1)
Not user accessible or replaceable
- Resonance is 915 MHz
- Gain = 2 dBi
- Ground path provide by Battery via PCB Ground Plane.

Figure 1. LoRa Module, Top Side

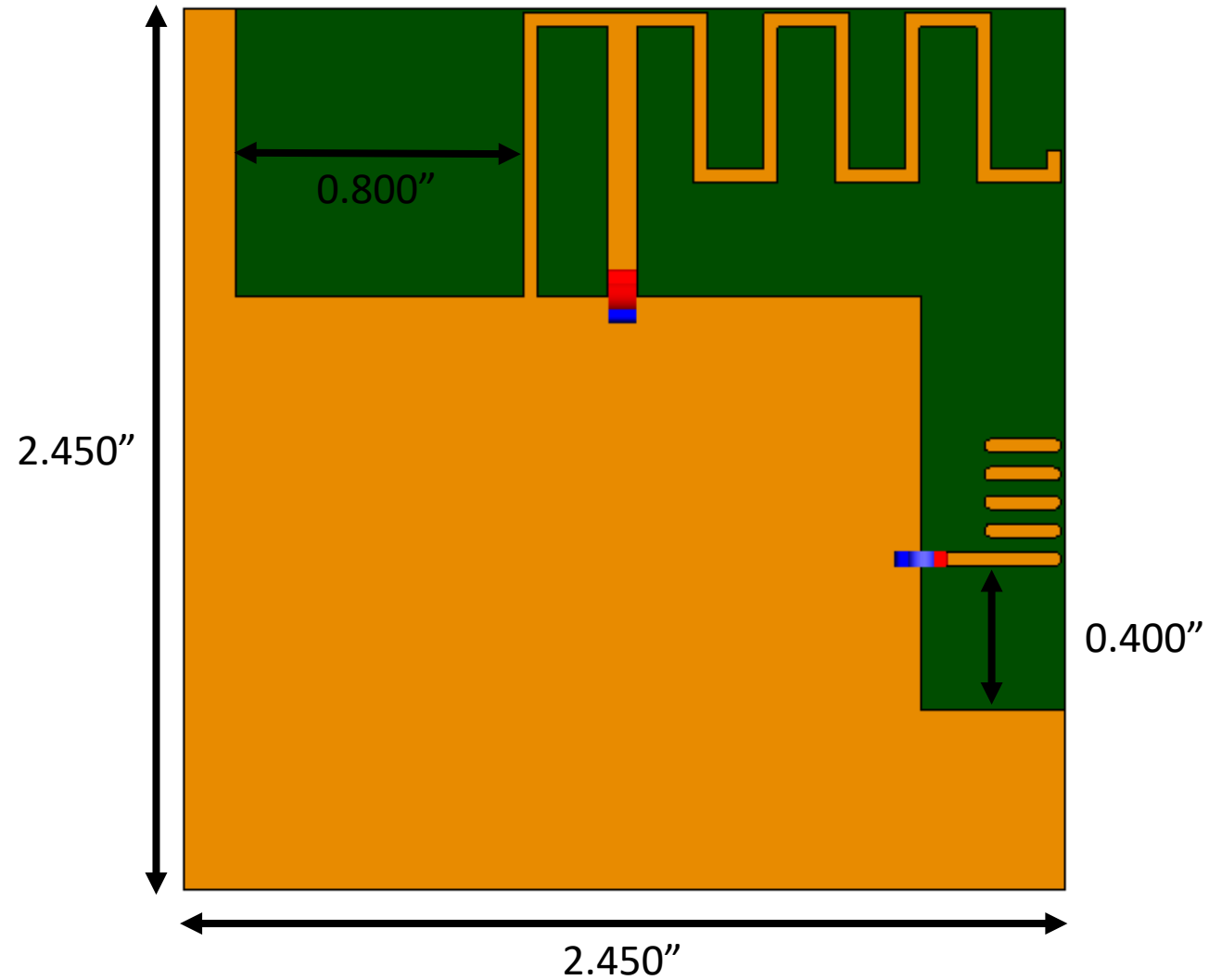


LoRa / GPS Module



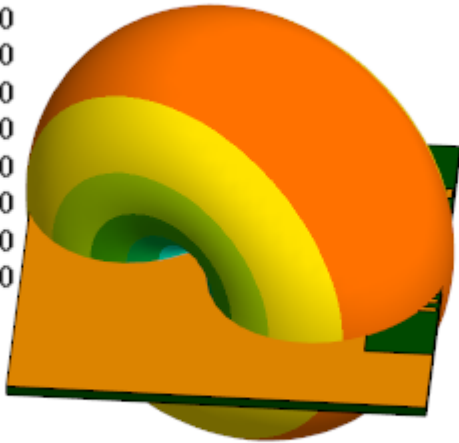
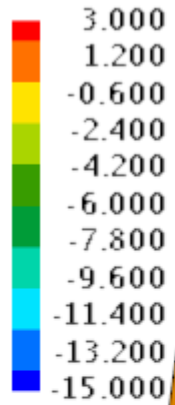
Spacing is set in order to achieve at least 10 dB of isolation between LoRa and GPS antennas.

Module Integrated with Carrier Board



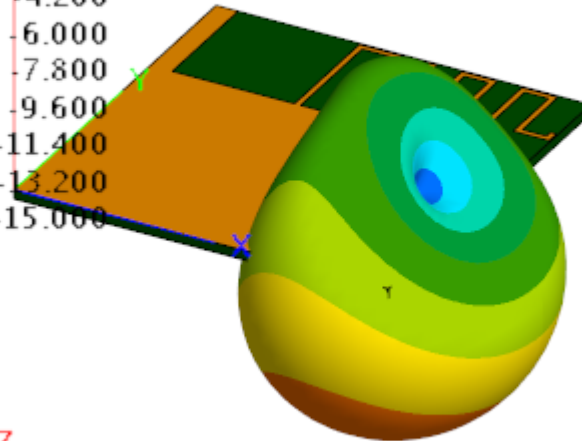
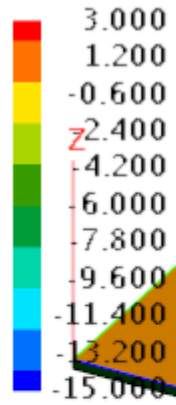
Gain Patterns

Total Gain [dBi]



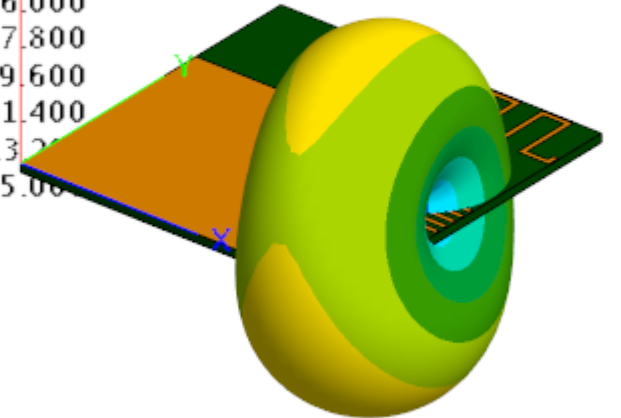
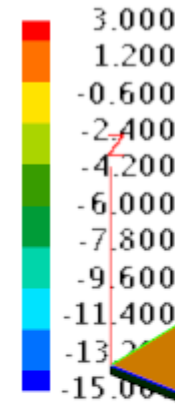
LoRa at 915 MHz

RHC Gain [dBi]



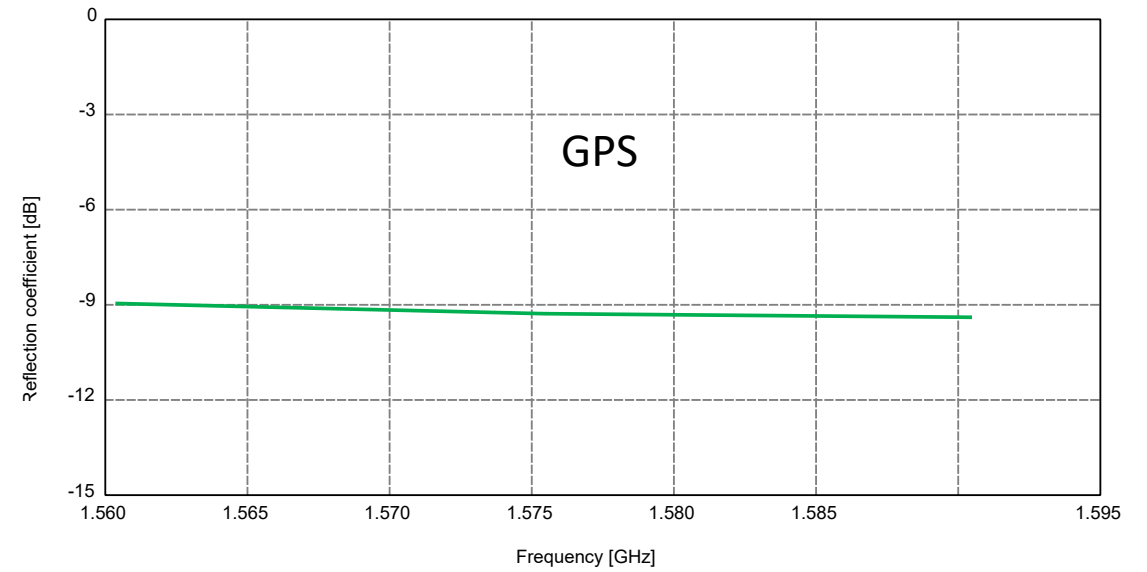
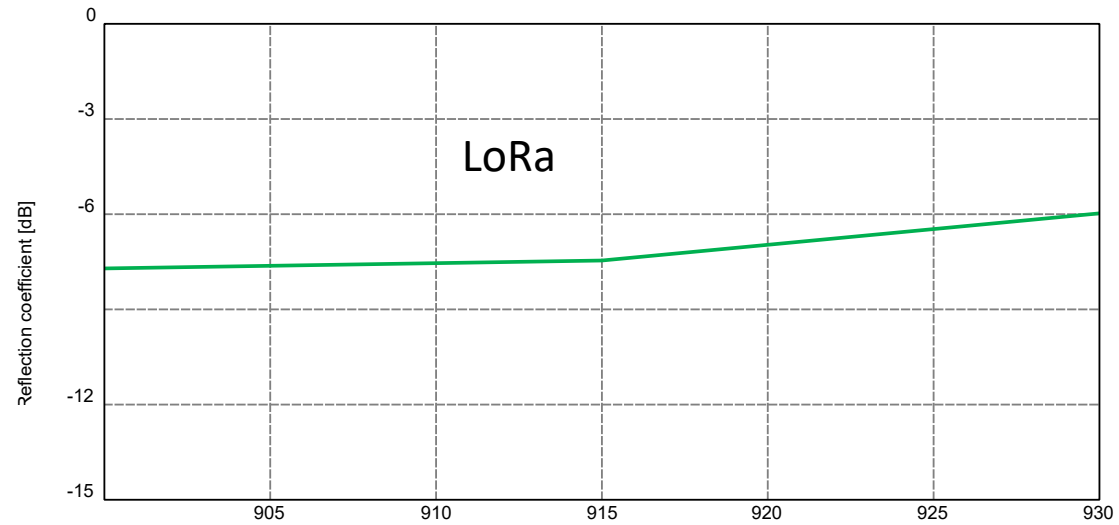
GPS at 1575.42 MHz

RHC Gain [dBi]



GPS at 1575.42 MHz
(with additional clearance)

Reflection Coefficient without Pi-Match



Total Radiated Power (TRP)

- Conducted Power (CP) is 1000 mW. Efficiency = TRP / CP.

