

FCC Antenna Diversity Overview

Antenna diversity switch determines transmits and receives to the unit. It will only output to one antenna at a time as defined by the software driver controlling the diversity switch.

Initial transmission is performed via the primary antenna. Diversity switch then reports receive levels that are used make a determination on which antenna to use for transmit. Transmit antenna selection is based on last good receive, software driver will use this to hard-set the antenna. Transmit on determined antenna will then be constant until the chip is again repowered or removed from suspend state.

Antenna one output received a higher radiated output due to it being the primary board antenna. It was place so as to receive maximum signal return. Antenna two radiates a lower signal due to its placement on the Pcb and surrounding components.

Antenna details: **Fractus - FR05-S1-N-0-102**

Frequency Range	2400-2500 MHz
Radiation Efficiency	> 70%
Peak Gain	> 1 dBi
VSWR	< 2 : 1
Polarization	Linear
Weight	0.2 g
Temperature	-40 to + 85°C
Impedance	50 Ω