



Operational Description

This device is an Dual Radio Concurrent AP/CB, which operates in both of the 5GHz and 2.4GHz bands and can't transmitting simultaneously, the maximum data rate could be up to 54Mbps which OFDM technique. If the signal to noise ratio is too poor which could not support 54Mbps, the 11Mbps data rate with DSSS technique will be applied.

The transmitter of the EUT is powered by 48Vdc from the POE.

The following antennas are used in this EUT.

Antenna	Type	Connector	Gain (dBi)
Internal	Patch	MMCX	15 (For 802.11a)
External	Dipole	N-type	8 (For 802.11b/g)

* Internal antenna was chosen for 5.0GHz test and external antenna was chosen for 2.4GHz test.

The other instruction, please have a look at the users manual.

FCC 15.407(c) states: The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met”

Data transmission is always initiated by software, which is then pass down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets (ACKs, CTS, PSpoll, etc...) are initiated by the MAC. There are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets are being transmitted.

