

## Operational Description

This device is a RF Switch, which operates in both of the 2.4GHz and 5GHz bands and can't transmitting simultaneously, the maximum data rate could be up to 300Mbps which OFDM technique. If the signal to noise ratio is too poor which could not support 300Mbps, the 11Mbps data rate with DSSS technique will be applied.

The transmitter of the EUT is powered by ac adapter. The information of antennas listed as below:

NO.	ANTENNA MODEL	TYPE	2.4G GAIN	5.0G GAIN	CONNECTOR TYPE
1	ML-2452-PTA4M3X3-1	PIFA	2.1dBi	3.95dBi	RSMA
2	ML-2452-PTA3M3-036	Ceiling mounted patch	3.5dBi	5.0dBi	RP-SMA-Male x 3
3	ML-2452-HPA5-036	Dipole	3.1dBi	4.6dBi	RP-SMA-Male
4	ML-2452-PNA7-01R	Panel	7.5dBi	6.3dBi for 4900-5250MHz 10.0dBi for 5250~5900MHz	Type N-Male

For more detailed instruction, please take a look at the user's 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.