

Operational Description

The device is a dual band wireless Access Point which operates at 2.4 and 5GHz band and supports IEEE 802.11 a / b / g / n / ac transmission modes. 80+80 MHz mode is not supported. This device is not capable of transmitting simultaneously in more than one Part 15 band between 5 and 6 GHz and therefore not subject to the PBA as defined in KDB 644545.

RF main chip RTL8197

Frequency range (MHz) 2412~2462 / 5180~5240 / 5745~5825

Modulation type DBPSK, DQPSK, CCK
BPSK, QPSK, 16QAM, 64QAM, 256QAM

Oscillating frequency (MHz) 40

Antenna type PCB antenna , 2dBi gain

Channel frequency

Mode	Channel	Frequency(MHz)	Mode	Channel	Frequency(MHz)
11b 11g HT20	1	2412	11a HT20 VHT20	36	5180
	2	2417		40	5200
	3	2422		44	5220
	4	2427		48	5240
	5	2432		149	5745
	6	2437		153	5765
	7	2442		157	5785
	8	2447		161	5805
	9	2452		165	5825
	10	2457		38	5190
	11	2462		46	5230
HT40	3	2422	VHT40 VHT80	151	5755
	4	2427		159	5795
	5	2432		42	5210
	6	2437		155	5775
	7	2442			
	8	2447			
	9	2452			

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 the turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets are being transmitted.