



Operational Description

This device is a 802.11ac Outdoor Dual Band Access Point with 5GHz internal antenna, which operates in both of the 5GHz and 2.4GHz bands and can transmitting simultaneously, the maximum data rate could be up to 866.7Mbps which OFDM technique. If the signal to noise radio is too poor which could not support 866.7Mbps, the 11Mbps data rate with DSSS technique will be applied.

The transmitter of the EUT is powered by DC 24V from POE. The antennas provided to the EUT, please refer to the following table:

External antenna								
Transmitter Circuit	Antenna Type	Connector Type	Antenna Gain(dBi) < excluding cable loss>	Inside EUT		Outside EUT		Frequency range (MHz to MHz)
				Cable Loss (dB)	Cable Length (mm)	Cable Loss (dB)	Cable Length (mm)	
Chain (0)	Dipole	RP-SMA	2.65	1	250	1.5	500	2400~2500
			2.7	1.2	250	2.9	500	5150~5850
Chain (1)	Dipole	RP-SMA	2.65	1	250	1.5	500	2400~2500
			2.7	1.2	250	2.9	500	5150~5850
Internal antenna								
Transmitter Circuit	Antenna Type	Connector Type	Antenna Gain(dBi)	Frequency range (MHz to MHz)				
Chain (0)	Patch Array	MMCX	12.5	5150~5850				
Chain (1)	Patch Array	MMCX	12.5	5150~5850				

※For 802.11a/b/g mode will fix transmission on Chain (0)

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.