

## Technical Description

This device is a High Powered 802.11a/g WLAN Mini-PCI 3A operates in 4.9GHz and both the 5GHz and 2.4GHz Bands with DSSS and OFDM technique. The transmitter rate could be 1/2/5.5/6/9/11/12/18/24/ 36/48/54Mbps (Turbo mode: up to 108Mbps). The transmitter of the EUT is powered from host equipment. The antennas are as following:

For 2.4GHz							
No.	Brand Name	Model No.	Gain (dBi)	Cable Loss (dB)	Net Gain (dB)	Antenna Type	Connector
1	* Wistron Neweb Corp.	DBA-SSMA-01	1.29	0.5	0.79	dipole	RSMA
2	CUSHCRUFT	SRSM2400MRA	2	0.5	1.5	dipole	RSMA
<b>Note:</b> For 2.4GHz antennas, <b>antenna 2</b> was selected as representative antenna for the test.							
For 5GHz							
No.	Brand Name	Model No.	Gain (dBi)	Cable Loss (dB)	Net Gain (dB)	Antenna Type	Connector
A	* Wistron Neweb Corp.	DBA-SSMA-01	2.06	0.9	1.16	dipole	RSMA
B	CUSHCRUFT	SRSM5150MRA	2	0.9	1.1	dipole	RSMA
C	** HUBER+ SUHNER	SPA 5500/40/14/O/V_C	13.5	0.9	12.6	panel	SMA
<b>Note:</b> 1. For 5GHz antennas, <b>antenna A and C</b> were selected as representative antennas for the test.							
1. “*” is a Dual Band antenna can be used in both 2.4GHz and 5GHz.							
2. “**” is an Outdoor Antenna it can only be used in point-to-point applications.							

Under normal use condition, the user has to keep at least 20 cm separation distance between radiator and the body of the user.

11abg could not simultaneously transmit with 90Y.

For more detailed instruction, please refer to 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.