

Operational Description

This device is a HP Wireless Display Adapter with built-in a WLAN IEEE802.11a/b/g/n function.

The device is power by 5Vdc from AC adapter. The types of the antenna are PIFA antenna and Dipole antenna with I-PEX connector.

The WLAN function is operates in both of the 5GHz (OFDM technique) and 2.4GHz (DSSS and OFDM technique) bands. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 150Mbps.

The EUT incorporates a SISO function. Physically, the card provides one completed transmitter and one receiver. For the 802.11n, the EUT is 1 * 1 spatial SISO (1Tx & 1Rx) without beam forming function. When the EUT operating in 802.11b, 802.11g, 802.11a, the software operation, which is defined by manufacturer, only set single Tx. The EUT complies with draft 802.11n standards and backwards compatible with 802.11b, 802.11g, 802.11a products.

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 hoe 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.