HT-360AXE, HT-360AXI, HT-360AXG

Operational Description

The HT-360AXE,HT-360AXI,HT-360AXG is a high-speed AP device. It provides sufficient bandwidth for high performance connection to the Internet. It has Web-based graphic user interface (GUI), in which you can easily modify the settings and connect to your ISP. It also provides flow statistics, connection status, and other detailed information. The HT-360AXE,HT-360AXI,HT-360AXG is easily upgraded and provides terminal users and ISP with the guarantee of future.

The HT-360AXE,HT-360AXI,HT-360AXG provides four GE LANs, one GE WAN, two USB host 3.0 interface, three 2.4G internal WIFI antennas and four 5G internal WIFI antennas. One SFP interface, two VOIP interface, The Ethernet and WIFI are used for connecting to computers, through which you can access the Internet. The WIFI interface support 802.11a, b, g, n, ac, ax 2.4GHz band and 5GHz band. It is an ideal broadband CPE solution for both home users who wish to share high-speed Internet access and small offices that wish to do business on the Internet.

The part number and memory capacity parameters of key chips used in the HT-360AXE,HT-360AXI,HT-360AXG are as follows:

Chipset   BCM68360+BCM6715+BCM6710+Si32280+ RTL8226

RAM   512MB DDR3

Flash   512MB NAND FLASH

Wi-Fi   2.4GHz BCM6710 built-in, 802.11b/g/n/ac/ax, 2T2R

5GHz BCM6715,802.11b/g/n/ac/ax,4T4R

Voice   Si32280

50MHz Crystal for BCM68360, BCM6715 and BCM6710 respectively
25MHz Crystal for RTL8226

2.4G WIFI:

Channel 1~11, 3T3R MIMO

Bandwidth: 20M/40M, 2412MHz~2462MHz

5G WIFI:

UNII-1, UNII-2A, UNII-2C, UNII-3, 4T4R MIMO

Bandwidth: 20M/40M/80M/160M, 5180MHz~5825MHz

WLAN 2.4G modulation: IEEE 802.11b: DSSS (DBPSK / DQPSK / CCK)

IEEE 802.11g: OFDM (BPSK / QPSK / 16QAM / 64QAM)

IEEE 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM)

IEEE 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM)

WLAN 5G modulation: IEEE 802.11a/n/ac OFDM(BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)

IEEE 802.11ax OFDMA(BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)

WLAN 2.4GHz and WLAN 5GHz can transmit simultaneously.

2.4G Antenna gain (Max.)

Ant1: 2.81dBi, Ant2: 3.01dBi, Ant3: 3.43dBi

Beamforming gain: 2.5dB

5G (5150~5350MHz) Antenna gain (Max.)

Ant1: 3.98dBi, Ant2: 4.41dBi, Ant3: 4.46dBi, Ant4: 4.56dBi;

5G (5470~5725MHz) Antenna gain (Max.)

Ant1: 4.43dBi, Ant2: 4.54dBi, Ant3: 4.48dBi, Ant4: 4.46dBi;

5G (5725~5850MHz) Antenna gain (Max.)

Ant1: 4.53dBi, Ant2: 4.33dBi, Ant3: 4.56dBi, Ant4: 4.48dBi

Beamforming gain: 2.5dB

802.11ax only support Full RU mode

MIMO mode support CDD/beamforming

The Transmit Power Control (TPC) feature in Broadcom Wi-Fi chips allows for the adjustment of the transmit power level of the wireless signal. TPC is designed to optimize the power consumption and range of the Wi-Fi connection.

The TPC control principle involves dynamically adjusting the transmit power based on various factors such as the signal strength, interference levels, and regulatory requirements. The chip continuously monitors the received signal strength and adjusts the transmit power accordingly to maintain a stable and reliable connection.

When the signal strength is strong and there is minimal interference, the TPC algorithm may reduce the transmit power to conserve energy and minimize interference with other nearby Wi-Fi devices. Conversely, when the signal strength is weak or there is high interference, the TPC algorithm may increase the transmit power to improve the signal quality and maintain a stable connection.

The TPC control principle ensures that the Wi-Fi chip operates within the regulatory limits defined by the regulatory authorities, such as the maximum transmit power allowed in a specific frequency band. This helps to prevent excessive interference and ensures compliance with local regulations.

In summary, the TPC control principle in Broadcom Wi-Fi chips dynamically adjusts the transmit power level based on signal strength, interference levels, and regulatory requirements to optimize power consumption, range, and compliance with regulatory limits.

The device will automatically discontinue transmission in cases of absence of information to transmit, or operational failure.