FCC ID: RSE-TG587N

Description of Operation

EUT is a <u>Wireless Residential ADSL Gateway</u> with 11 channels. This device provided 1/2/5.5/11/6/9/12/18/24/36/48/54/6.5/13/ 19.5/26/39/52/58.5/65/78/104/117/130 Mbps of transmitting speed. The device of RF carrier is DQPSK, DBPSK, CCK and OFDM. The device adapts direct sequence spread spectrum modulation. The antenna is <u>Dipole</u> Antenna (Antenna x 2 (2T2R MIMO Technology)).

This <u>Wireless Residential ADSL Gateway</u> is an IEEE 802.11b/g/n AP. It allows your computer to connect to a wireless network and to share resources, such as files or printers without being bound to the network wires. Operation in 2.4GHz Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplex-ing (OFDM) radio transmission, the <u>Wireless Residential ADSL Gateway</u> transfers data at speeds up to 64/128-bit Wired Equivalent Protection (WEP) algorithm and the new industrial-strength WPA (Wi-Fi Protected AccessTM) security is used. In addition, its standard compliance ensures that it can communicate with any 802.11b/g/n network.

EUT has been verified, no Ad Hoc mode is provided.

802.11b/g

Items	Description		
Power Type	22VDC from adapter		
Modulation	DSSS for IEEE 802.11b ; OFDM for IEEE 802.11g		
Data Modulation	DSSS (BPSK / QPSK / CCK) ; OFDM (BPSK / QPSK / 16QAM / 64QAM)		
Data Rate (Mbps)	DSSS (1/ 2/ 5.5/11) ; OFDM (6/9/12/18/24/36/48/54)		
Frequency Range	2400 ~ 2483.5MHz		
Number of Channels	11		
Channel Band Width (99%)	11b: 13.04 MHz ; 11g: 16.40 MHz		
Conducted Output Power	11b: 17.68 dBm ; 11g: 22.13 dBm		

Ant. No.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	ETON	ET866	Dipole Antenna	NA	2.50
2	ETON	ET866	Dipole Antenna	NA	2.50

Note: EUT has two identical antennas (Ant. 1 and Ant. 2) and can transmit through both of them. These two antennas have same value of gain and are same type.

802.11n

Items	Description		
Power Type	22VDC from adapter		
Data Modulation	DSSS (BPSK / QPSK / CCK) ; OFDM (BPSK / QPSK / 16QAM / 64QAM)		
Frequency Range	2400 ~ 2483.5MHz		
Number of Channel	11 for 20MHz bandwidth		
Channel Band Width (99%)	Single (Tx) : 17.48 MHz ; Two(Tx) : 17.56 MHz		
Conducted Output Power	Single (Tx) : 24.55 dBm ; Two(Tx) : 23.76 dBm		

Ant.	No.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1		ETON	ET866	Dipole Antenna	NA	2.50
2		ETON	ET866	Dipole Antenna	NA	2.50

Note: EUT has two identical antennas (Ant. 1 and Ant. 2) and can transmit through both of them. Device is

operating in a 2x2 Spatial Multiplexing MIMO configuration. Multiple antennas are used to 2 x transmit and 2 x receive signal.