

DESIGN AND REALIZATION ANTENNA BIQUAD DUALBAND ON FREQUENCY 2.3 GHz - 2.4 GHz and 3.3 GHz - 3.4 GHz

ABSTRACT

WiMAX and Wi-Fi, a technology standard of the Metropolitan Area Network (MAN) made as a solution to problems with the cable network. That way, the need for an antenna that can meet the requirements of dualband capable of operating in the area of operation to cover the desired frequency band. So far, many antennas are designed with the ability of the dualband operation.

In this final, Dualband antenna design and realization of the same side of the rectangular-shaped or square-arranged two pieces and is called biquad antenna for WLAN and WiMAX applications .. The antenna is able to work at a frequency of 2300 - 2400 MHz and 3300 - 3400 MHz with $VSWR \leq 1.5$ limitations. For antenna radiation pattern is omnidirectional so that the antenna can radiate in all directions with a wave of linear polarization. While the size of the antenna gain is ≥ 5 dB. This antenna is designed using a method that combines dual resonator resonator antenna that is two different dimensions, to produce an antenna with an optimal antenna capabilities such as radiation pattern, the working frequency and antenna gain (gain).

Keywords: Biquad Antennas, Dualband.