ABSTRACT

Biquad antenna is a development of square loop using array concept by assuming amplitude and phase are uniform. This antenna is popular because of easy fabrication and cheap materials that is required. In designing this antenna, caharacteristics of antenna are required.

This final project developed a e research on Double Biquad Dualband antenna including characterization, design and realization. Characteristics of antenna are including the influence of its side length and its radius on gain and impedance. By using multi resonance method, the dual band antenna is obtained, so that this antenna can be used for Wi-Fi and WiMAX Application.

Prototype are made according to the model of simulation and the result which is obtained from the frequency measurement at VSWR < 1,5, that is frequency range at (2133 - 2533) MHz and (2875-3475) MHz. The radiation pattern of the antenna is bidirectional and also its polarization is eliptical polarized. The Gain of this antenna are able reach untill 12,04 dBi.

Keyword : Antena Double Biquad, Dualband