

ABSTRACT

Emerging technology with wireless transmission, makes it easy for the user to freely move anywhere. Antenna has a high directivity is one of the vital components that important role in long-distance wireless communication system. Triple Biquad antenna is an antenna rectangular or square equilateral compiled six. The radiation pattern result is bidirectional. The reflektor function increases value of the gain.

Antenna that is realized in this final form microstrip antenna with the addition of flat reflector. Specifications include the antenna operating frequency of 2.4 GHz for W-LAN applications and VSWR is not more than 1.5. The radiation pattern is used so that the power emitted Unidirectional focused in one direction. The execution begins with the gathering of theory, followed by the determination of the specifications and dimensions of the antenna.

Triple biquad antenna with a flat reflector that has been made in accordance with the simulation modeling. VSWR is gained that is 1,104 at a frequency of 2.4 GHz. Antenna has unidirectional radiation pattern and elliptical polarization. The maximum gain that can be achieved antenna fabrication result is 10.42 dBi. The use of reflectors affects the antenna characteristics, especially on the gain and radiation patterns.

Keywords: W-LAN, Triple biquad, Flat Reflector, VSWR, Unidirectional, Gain