ABSTRACT

Antenna has many functions and variances that depend on the type of communication that are served. In general, the antenna functions as a matching impedance device between propagation space and transmission line.

Caturcula Binomial Omnidireksional Antenna is an antenna based poligonal antenna, the antenna that has many branches. Each branch is based microstripe with dielectrics which have been determined and has been transformed to the plate (PCB) to facilitate the realization. Then, plate (PCB) to the plywood for the construction of a stronger. The dimensions of microstripe are determined using technique pat transformer λ/4 binomials, where the number twelve is level. The antenna is designed using a portion monoconic which serves to distribute matching between the antenna and coaxial impedance.

At the end of this final project, has realized an antenna that has wide bandwidth, that is an Caturcula Binomial Omnidireksional Antenna who have linear polarization with the frequency of 0,3 – 3,0 GHz. Election frequency 0,3 – 3,0 GHz are expected to include applications in the communication at this time. Parameters analyzed include: VSWR, bandwidth, gain, polarization, and radiation pattern is seen from the parameters and with the measurements made directly after the prototype.

All data analysis and measurement will be valid the form of an antenna configuration Caturcula Binomial Omnidireksional which have wide bandwidth that can support a variety of communications systems technology at this time.

Key words: Caturcula Binomial-Omnidireksional Anntena, Monoconic