

ABSTRACT

WiMAX (Worldwide Interability for Microwave Access) technology is one of wireless technology which is developing nowadays to conquer the utilization of communication with cable. Antenna is one component of WiMAX which has important role as a transformer of electromagnetic wave.

Antenna is a tool used in adjusting radio channel impedance with propagation channel impedance. Wideband antenna is important for many telecommunication service which works in high frequency and has ultra wide band, so that it can carry information signal for many services and energy efficient.

With the help of Network Analyzer dan other tools, we will design a prototype model of Dipole Co-Linier Antenna Structure for Wimax in Frequency 3.3 – 3.4 GHz with 50Ω in $VSWR \leq 1.5$, omnidirectional radiation pola, and linear polarization. This final project will be designed in approximately 5 months, until we get the Dipole Co-Linier Antenna Structure prototype which is suitable with the technic design consist of The measurement that will be done includes the measurement of impedance, VSWR, gain, radiation pola, polarization, and work frequency.

Keywords: Antenna, Dipole Co-Linier, Frequency 3.3 – 3.4 GHz