

ABSTRACT

WiMAX (*Worldwide Interoperability for Microwave Access*) is the broadband wireless access technology which is being the focus attention of telecommunication operators and internet businessman in the world now. Using IEEE 802.16e standard, WiMAX is capable to provide data services within speed up to 75 Mbps in radius of 5 km. This system supports the technology of interactive gaming, VoIP, video conference, streaming media, information technology, and media content download.

In order to realization this technology in a perfect way, it needs antenna instrumentation that capable to operate on predetermined standard. So, it needs the antenna which has the appropriate gain and the suitable and efficient radiation pattern. And Triple Biquad antenna is chosen because it's expected to fulfill those standards.

Triple Biquad antenna is a development of Biquad antenna. This antenna is designed to work in bandwidth 100 MHz at frequency of 3300 to 3400 MHz in range of VSWR less than 1.5. Radiation pattern of this antenna is omnidirectional and polarization of this antenna is linier. Gain of this antenna is more than 16 dBi.

Keywords: Triple Biquad Antenna, WiMAX 3.3 - 3.4 GHz