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

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