ABSTRACT

Ministerial Regulation of Kominfo No 32 Year 2013 on Organizing Digital Television Broadcasting and Multiplexing Broadcasting Through Terrestrial System which has been established by the Ministry of Communication and Informatics as regulator. So it takes digital television antenna to get signal quality with optimal. Digital television antennas that exist today still has some shortcomings that have a narrow bandwidth.

In this final project design and realization of triangular patch antenna with linear array method using CST Studio Suite software which has wide bandwidth so it can work optimally in receiving broadcast from digital television. Designed antennas operate at a frequency of 500 MHz - 700 MHz with VSWR ≤ 2 , Return loss ≤ -10 dB, has unidirectional radiation pattern and wide bandwidth.

The results of microstrip antenna measurements for digital television working at 500 MHz - 700 MHz frequency bandwidth parameters of 400,2 MHz, gain of 3.21 dBi, VSWR 1.25 Return loss -18.79, and have unidirectional radiation pattern.

Keywords: Digital Television, Microstrip Antenna, Triangular, Array