

## **Abstract**

LTE (*Long Term Evolution*) is a new name for service that have high ability in mobile communication system. Various of configuration and characteristic in LTE technology needs support hardware. One of hardware support is from side of transmission. Will be need transmission tools that suitable with LTE technologies. The tools of that transmission is antenna. Then the problem is how to create an efficient antenna, that have small dimension and easy to configured. So . Shape of the antenna have several specialty, such as slim dimension, easy material, and have big range of frequency.

Based on the above conditions, this research was made of microstrip antenna with a triangular patch. This antenna works on 1800 MHz frequency with  $VSWR \leq 1.5$ . To meet transmits ability of data is good, the antenna has designed with *gain* above 0 dBi

From the simulation results, obtained values of VSWR is 1,384 at center frequency in 1.891 GHz for the antenna. *Gain* obtained from the measurements is 2,609 dBi. This antenna has a transmit pattern of unidirectional and polarized circular.

**Key words: Microstrip antennas, LTE, triangular patch**