

ABSTRACT

In the growth of technology, especially telecommunications by radiowave is not discharged from the use of antenna as an important device to transmit and accept that wave. in technique antenna can be defined as a functioning structure to transforming electromagnetic wave guided in transmission channel become the free space wave on the air or in the contrary.

This antenna was designed and realizationed in frequency region of 1500-2500 MHZ. In the common, characteristic of yagi antenna are narrow band, and consisting of one driven linear dipol $\lambda/2$, one reflektor, some directors in a region frequency. However, by using electrical bow-tie dipole as the driven and also variation of its passive elements, bandwidth from antenna will be wide as according to the design

To know the performance of antenna that has already match with specifications which have been determined before, in this final project was also done the measurement and testing of its parameters, such as measurement of input impedance(Z_{in}), measurement of antenna bandwidth, measurement of VSWR, measurement of radiation pattern and measurement of gain antenna. From the measurement result, in the limit of VSWR, it is reached bandwidth of 1311.92 MHZ and gain 14.56 dBi.