

ABSTRACT

Microstrip antenna is a popular antenna because has the advantage of being compatible in terms of dimensions that are very lightweight and small so easy to integrate.

At the Final Project design has been successfully created rotator antenna based on microcontroller to know value of the elevation and azimuth with addition microstrip probe feed antenna 2.4 GHz. Materials to be used are epoxy PCB (FR4) with double layer material thickness 1.6 mm, 4.4 dielectric constant, ATmega32 microcontroller, and two servo motors AX12+ which connects to the remote, so the practitioner just simply pressing the button on the remote to know value of elevation and azimuth patterns on receiver (Rx) antenna.

Electrical systems, antenna, and all kit practicum in Polarization module has been successfully created. With the tools of this Final Project expected can easily to know and analysis value of elevation and azimuth patterns. Beside that microstrip antenna probe feed 2.4 GHz can be used as a reference in measuring elevation and azimuth patterns for the wi-fi antenna.

Keywords: Antenna, Microstrip, servo motor, microcontroller, elevation, azimuth, VSWR, frequency