Abstract

Indonesia is an archipelago that has thousands of islands and giant of waters. The security system of Indonesian waters is better equipped by providing radar to control all the activities that have occurred in the waters around the coast of Indonesia. Radar is able to give all the information's about activities around the coast.

At the end of the project entitled Design and Realization of Microstrip Antenna Arranged by 8 Patch Squares In The frequency of 13.4 GHz (Ku-Band) For Radar Applications of Trustees Coast starts by calculating the dimensions of the antenna in accordance with the existing formula. The result of dimensional calculation will be used in the simulation process using the software. Modification of the antenna dimensions are used as a way to get optimum results in the simulation, then the optimum dimensions used in the manufacturing process. Subsequently, after the manufacturing process, the antenna is obtained, and directly measured to obtain the parameters alsodesired parameter.

Microstrip antenna at the end of the project is to apply the patch array antenna 8 pieces. Microstrip antenna works on Ku-band frequencies, with the desired bandwidth specification can reach 60 MHz, limited to ≤ 1.5 VSWR, gain 12 dbi.

Keywords: ***microstrip antenna, the 8 square patch antennas array, ku-band***