

ABSTRACT

In this study, a rectangular microstrip antenna with parasitic design was carried out which was applied for GPS purposes at a frequency of 1575 MHz using a truncated corner. Microstrip antenna is the most popular type of wireless used today, very easy to fabricate and cheap because it only uses a printed circuit board but has a very strong structure. Groundplane elements and layers below. The single element and groundplane are made of copper. The printed design is a prototype in the form of a 2x2 rectangular linear array microstrip antenna due to the unavailability of measurement tools. The results of the antenna design that have been made and simulated are the frequency of 1575 MHz resulting in a return loss value of -13.02 dB, a bandwidth of 171 MHz, a VSWR of 1.999, and a gain of 7.505 dB in the iteration results. In this research, design of Rectangular Microstrip Antenna with Array Method for Global Positioning System (GPS) application was conducted at 1575 MHz frequency.

Keywords: Antena, Mikrostrip, Array, Truncated Corner, GPS