

ABSTRACT

Video images of the land and the air is very important data for monitoring a particular area or for researchers to be able to analyze the natural events that occur a certain area, the data obtained is very useful for some areas, but to get the data in the air is not easy due to the decision to place the tool data must be in the air.

In this final project has been designed wireless transceiver on the camera for moving objects with control of the Earth (Ground Segment) that can take video images in real time to a distance of 150 meters, using Tx Module IC 5823 having 11 dBm transmit power, and IC Module Rx 5808 who have received power -90 dBm.

From the measurement antenna, for cloverleaf antenna has a gain of 1,896 and 1,824 SWR, whereas for microstrip antenna has a gain of 2,381 and a 1.5 SWR. From these results make a video transmission distance can not reach up to one kilometer. Judging from the video transmitter weighs only 41 grams, making video transmitter can be used on the RC boat, quad copter, and RC car. And for quality video, up to a distance of 120 meters, the video quality is still considered pretty because it has a MOS value greater than 3.

Keywords: wireless camera, transmitter, transceiver