

ABSTRACT

According to population data in 2020 by the Population Service of Klaten Regency, Gatak Village, Delanggu District has a population of 5,457 people, the area of Gatak Village is 19.37 Km² which is 3.96% of the area of Sukoharjo District. The aim is to facilitate the mobility of information and it is necessary to build telecommunications technology. The technology loaded is a wireless network because it is flexible, can reach the surrounding area, this system uses microwaves to transmit signals. For the microwave design that is applied to the Delanggu and Gatak 2 sites, it uses pathloss 5.0 software. The analysis is carried out by calculating the Link Budget generated by link planning, both non-diversity and space diversity planning. This calculation is used to ensure that the receiving power level is greater than the threshold power, so that the received signal is strong enough. The availability value is used as a benchmark in ensuring the system functions properly to handle fading and attenuation.

Keywords : pathloss 5.0, Microwave, Site