

ABSTRACT

The increasing demand for the internet network, multimedia access, and telephone cables in the social communities and one of them among households, we need a technology that can meet all these needs. A technology in the world of telecommunication that can meet all these requirements is the technology of FTTH (Fiber To The Home). A FTTH network that uses fiber optics as the transmission medium capable of transmitting data at a wide bandwidth so that it can serve the needs of customers with excellent quality. This final project using research methods include study case on PT. Telkom Access Solo and study literature, survey methods is micro demand survey to Solo and the surrounding areas, as well as interview methods to obtain information about FTTH. The Final Project is started by homepasses survey to Mojosongo Solo areas, then after the survey data obtained followed by data processing in microsoft excel and inputting data into google earth. Once all the data has been inputted, then the next step is to design the entire device constituent FTTH networks using google earth. The output from this final project is a link budget calculation and Bill Of Quantity (BoQ table). The average of damping on the boundary C with two-stage scenario 1:2&1:16 is 21.23 dB, two stage 1:4&1:8 is 21.03 dB, and in one stage 1:32 is 20.75 dB. The BoQ table at the boundary A deliver the highest device needed compared to the other boundary, because the boundary A has the highest number of homepasses the 1234 unit.

Key Words : FTTH (Fiber To The Home), Homepass, Google Earth, Link Budget, Bill Of Quantity.