

ABSTRACT

The FTTH network cannot be separated from a device called ODP (Optical Distribution Point) which is a device that functions as a device that distributes optics to the end point (rosette) using an indoor cable and then from the rosette to the customer's ONT using a core patch cable. In this ODP there is also an adapter or coupler device that functions as a liaison between two fiber cables. But unfortunately on this device there are often several disturbances that cause the amount of attenuation so that it is necessary to change the adapter regularly or clean the components of this adapter.

This final project will measure and analyze the effect of adapter interference on the amount of attenuation at Telkom Kupang Witel Access. The method used in this study is a calculation using an OPM measuring instrument and questions and answers to field technicians. Measurements will be taken using a measuring instrument called an Optical Power Meter (OPM) which one of its uses is to measure attenuation at the Optical Distribution Point (ODP) so that the difference in attenuation is known each time data is taken on ODP. The disturbances that I will see and make here are rainwater, hot sun, and also dust.

The results of this study indicate that the effect that has the greatest impact on the increase in attenuation is the effect of dust. Then the least effect on the increase in attenuation is the influence of rainwater. Then also the effect of heat still gives the effect of increasing attenuation but it is smaller than dust and larger than rain. In addition, this ODP component is expected to always be closed so as to minimize the effects that I mentioned above.

Keywords: *ODP, FTTH, OPM*