ABSTRACT

Loss measurements on a series of fiber-optic network is very important. This is done to determine how the amount of loss that is on a fiber optic network. This loss measurement is very important because the amount of power loss optical fiber is very influential at a high rate of data transfer. To measure the amount of power loss in the optical fiber network is influenced by several parameters such as cable length, number of connectors and number of connections. To measure these parameters requires a special device in the form of OTDR (Optical Time Domain Reflectometry) whose price is relatively quite expensive so as become a problem for students and educational institutions due to limited OTDR device.

Based on the above issues then made an application measurement and analysis of power loss optical fiber using matlab. This manufacturing process is done with the input parameters of the components on the FTTH network that is obtained through measurement in STO Telkom Rajawali Bandung and Backbone Network Mitra-Tel Jakarta.

By measuring loss FTTH network using MATLAB acquired a 100% accuracy rate when compared to field measurements.

Keywords : Matlab , loss , OTDR, fiber optic