

ABSTRACT

Fiber optic needs Replace the existence of copper wires, stability of connection and data access speed is needed to help human work. With the information of calculation of loss of fiber optic cable is expected to achieve maximum performance. Methods of research conducted by determining the location in the residential area of Tanjung Priok, data collection, calculation manually with the method of power link budget, rise time budget, then in comparison with the standard KPI PT TELKOM ACCESS, Benchmarking The measurement results of the new OPM tool concluded the FTTH network is in decent condition or not. Result of calculation of Power Link Budget -22,105 dBm up to -19,785 dBm, OPM measurement result -26,35 dBm up to -19.40 dBm, Rise time Budget of 0, 281 ns, and total system damping of 22.105 dB and then compared with KPI standard of PT TELKOM ACCESS With the maximum standard applied to the received power (receiver sensitivity at ONT) of -28 dBm, the rise time value does not exceed 70%(is still below 0.562700 ns) and total system loss of a maximum of 28 dB. Although when the condition is broken the Prx value is still below the KPI standard, but the customer cannot access the 3P service, then the technician is checked. Then the FTTH network is said to be feasible because all indicators are under the standard KPI of PT TELKOM ACCESS.

Kata kunci : FTTH, Fiber Optic, Power Link Budget, Rise Time Budget, Total Loss, KPI.