ABSTRACT

Current and future technologies, already using broadband or broadband access technology based on IP technology (Internet Protocol), to support this technology is required network access to full fiber-optic customers, where the technology uses the FTTH (Fiber To The Home) architecture. Therefore, the author will discuss broadband access with GPON technology (Gigabit Passive Optical Network) and NG-PON 2 (Next Generation Passive Optical Network Stage 2).

In this research, writer cooperate with PT. Telkom Access. Where the location to be researched in the apartment cinere terrace suites. In the current GPON technology for receiver side and delivery side (bitrate 2.5 Gbps downstream direction and 1.25 Gbps upstream direction) still use two different optical cores, in contrast with NG-PON2 technology for receiver side and side of road using single core optical (bitrate is given 40 Gbps downstream direction and 10 Gbps upstream direction).

It is expected in this research that is making data about speed carrying data between GPON and NG-PON2 tenology and using core and device used also that can be used for customer and PT. Telkom. Access.

keywords: FTTH, Broadband Access, GPON, NG-PON2, TriplelPlay