

EVALUATION IN TRANSPARENT OPTICAL NETWORK ARCHITECTURE WITH PON ACCESS

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The evolution of telecommunication networks towards the transport of multimedia data (internet, telephony and IPTV) makes it necessary to seek systems offering high bandwidth and multiple access to resources. The optical network currently represents a reliable solution thanks to the qualities of the fiber (transmission channel) and the development of FTTH (Fiber To The Home) technology and also the establishment of passive optical networks (Passive Optical Network: PON). The "shared optical network" concept saves the cost of fiber and optical components between the various customers connected to the FTTH-GPON network. In this paper, analyzing designing and implementing of FTTH access network based on GPON for residential condominium.

Key words: Optical fiber; FTTH; Passive Optical Network; IPTV; Components Optical; Multiple Access.