Design and Optimization of EPON Link

Abstract

EPON (Ethernet passive optical networks) is a new technology that is inexpensive, simple and capable of delivering bundled voice, data and video services to an end user subscriber over a single network. The Proposed EPON link is designed using the Optisystem software by taking transmitter and receiver and optical fiber to send and receive bundled data from each other. The link is further improved by selecting wavelength, transmission distance, transmission capacity and selecting different modulation schemes to make the EPON link more efficient.

References

3. Baljeet Kaur, Ajay K. Sharma, Vinod Kapoor; “Performance improvement on OVSB based
WDM RoF-EPON link using SOA with DCF and FBG”; Optik 125 (2014).

Index Terms

Computer Science Software Engineering

Keywords

EPON (Ethernet passive optical networks), OLT (optical line terminal), ONU (optical network unit), ODN (optical distribution network)