Simulative Analysis of Bidirectional BPON System at Low Insertion Losses and Attenuation

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Abstract

The impairments like insertion losses and attenuation at ODN (optical distribution network) are affected the performance of PON systems. In this paper, a BPON (broadband passive optical network) system is deployed to improve the performance of passive components at ODN which has a minimum insertion losses and attenuation is 0.1dB/km in optical fiber. The system performance is analyzed on the basis of parameters such as quality factor, minimum BER and eye height is demonstrated on simulator. It will enhance the network efficiency and capacity in optical communication system. Also, it will reduce the network termination cost and raise the number of users at receiver end by using 1:8 splitter passive component.

References


Index Terms

Computer Science Networks

Keywords

BPON, BER, Quality Factor and insertion losses