Abstract

In this paper, Performance evaluation of Gigabit Ethernet Passive Optical Network in the presence of Forward Error Correction techniques has been observed. It has been observed that Q2 value lies in the range of 13 to 7dB and 20 to 7dB at 2.50 Gbps in the absence and presence of FEC at transmission distance of 10 to 40 km in GEPON. Similarly the BER lies in the range of 10-5 to 10-2 and 10-23 to 10-2 without and with FEC at transmission distance of 10 to 40 km. Hence with FEC technique, we have achieved BER of 10-13 at 30 km with bit rate of 2.50 Gbps in GEPON.
References


Index Terms

Computer Science Communication and Networks

Keywords

Forward Error Correction Passive Optical Networks Optical Distribution Networks Optical Network Termination

Optical Line Terminal