Abstract

This paper is based on the study of communication systems over fiber optics. To design high-speed systems with high performance, it is necessary to compensate the dispersion with the help of Fiber Bragg Grating. The performance of the communication system simulation is done on Optisystem simulator Vr.12 at different parameters of the system. A high-speed NRZ signal is transmitted over SSMF. By simulating the design of optical communication systems at different values, which includes Q-Factor, Min BER, MZM-Extinction Ratio, FBG length is evaluated. With the help of eye diagrams, better results are obtained.

References


Index Terms

Computer Science

Keywords

Optical Fiber Communication, Fiber Bragg Grating, Dispersion compensation, Optisystem Simulator.