Abstract

Optical communication in case of WDM system is processing at an astonishing due to high transmission capacity. In this paper, we developed 32 channels WDM system at 40 Gbps is used to improve the system quality at different power levels and frequency spacing at the length of 50 km using single mode fiber (SMF). EDFA is used for better gain. In this work we enhance the system efficiency and system capacity by using DCF (dispersion compensating fiber). Also, BER an analysis has been shown through simulation at various power levels and frequency levels, the results are shown in terms of BER, Q-factor and Eye height using optisystem 7.0

References

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Index Terms

Computer Science  Applied Sciences

Keywords

Wavelength division multiplexing (WDM), single mode fiber (SMF), Erbium doped fiber amplifier (EDFA), BER, quality factor (Q-Factor), optisystem 7.0