



Scienxt Journal of Electrical & Electronics Communication
 Volume-2 || Issue-2 || May-Aug || Year-2024 || pp. 1-20

Review of a noval approach for dispersion compensation in optical system with a fiber bragg grating

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Abstract:

In optical communication system to compensate dispersion Fiber Bragg grating (FBG) is one of the applicable and important components. Here we are calculating best amount of parameters by simulating the model and then observe the effect of this component in data receiver. To tackle the nonlinear effects of transmission system Fiber Bragg grating has been employed with optisystem software very length. The analysis based on the chromatic dispersion.

We are design system with fiber Bragg grating and without fiber Bragg grating and very the length. The role of the communication channel is to transport the optical signal from transmitter to receiver without distorting it. Most light wave communication systems use optical fibers as the communication channel because fibers can transmit light with a relatively small amount of power loss. Fiber loss is, of course, an important design issue, as it determines directly the repeater spacing of a long-haul light wave system. Another important design issue is fiber dispersion, which leads to broadening of individual pulses inside the fiber.