

Continues and Pulsed Laser Beam Modulation

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Abstract:

In this report, we theoretically study the modulation of the continuous and pulsed laser beam. In the beginning, we introduced the main laser modulation types: the amplitude, the frequency, and the phase modulation. Then we presented an overview of the continuous and pulsed laser beam modulation techniques. We numerically analyzed the frequency modulation of a continuous carrier laser beam at different deviation constant of a message signal. Also, we study the phase modulation of the Gaussian laser pulse at different phase shifts .

Keywords: Laser Modulation, Self-Phase Modulation, Gaussian Pulse