

Calibration of Optical Receivers and Modulators Using an Optical Heterodyne Technique

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The frequency response of optical receivers are accurately calibrated by measuring a heterodyne signal generated by mixing two Nd:YAG ring lasers. This heterodyne system offers more than 50 dB of dynamic range. Calibration of optical phase and amplitude modulators is achieved by downconverting a sideband of the modulated optical carrier to a fixed IF frequency with another laser. This technique eliminates the need for a high speed receiver.

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