

# Single-sideband modulated fiber optic communication

Abstract: We propose and experimentally verify a novel approach to achieve phase-coherence orthogonally polarized optical single sideband (OSSB) modulation with a tunable optically carrier-to ...

In this paper, three different single-sideband (SSB) modulation schemes, based on the dual drive Mach-Zehnder modulator (DD-MZM), IQ-MZM operating in push-push and push-pull ...

Single-sideband modulation sends information by transmitting only one of the two sidebands you get with amplitude modulation. This method cuts down on bandwidth use and boosts ...

We propose novel SSBI-free SSB conversion technique of high-speed PAM signals by phase modulation and show improvement of CD tolerance of MZ and EML transmitter by  $\times 6$  and  $\times 7.6$  times ...

A single sideband suppressed-carrier (SSB-SC) optical modulator is demonstrated. The sideband is suppressed by means of a fiber Mach-Zehnder interferometer with amplitude electro-optical ...

An exploration of single-sideband (SSB) modulation and demodulation techniques. The article discusses the principles, fundamental methods, and circuits involved in SSB modulation, highlighting its ...

Optical single-sideband (SSB) transmission technique fills the gap between intensity-modulation/direct-detection (IM/DD) and digital coherent transmission technologies.

In this paper, an optical single-sideband (OSSB) modulation radio over fiber (RoF) link with tunable optical carrier-to-side-band ratio (OCSR) and simultaneous third-order intermodulation ...

simulation study of the Radio over Fibre (RoF) Carrier Suppressed Single Sideband (CS-SSB) modulation scheme. This scheme is based on a Dual Parallel Dual Drive Mach-Zehnder modulator ...

We review our recent work in the implementation of optical single-sideband (OSSB) modulation and in the application of this modulation format to microwave photonics and optical ...

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