Analysis of MIMO-OFDM using different Modulation Techniques

Volume 153

Number 6

Year of Publication: 2016

Authors:

Nidhi Kishor Molgi, Suresh R. Hallhalli

Abstract

MIMO-OFDM system is fast growing new wireless broadband technology which has capability of high data rate transmission and advantages like inter carrier interference (ICI) reduction; high reliability; and better performance in multi-path fading. The major effect to be considered at receiver is fading effects which must be mitigated at receiver using equalization technique. In this paper we demonstrated the BER performance of the OFDM system with two different equalizers (ZF and MMSE). Proposed OFDM system is demonstrated using various modulation techniques that is BPSK, QPSK, 16-QAM and 64-QAM using multipath fading channels that is AWGN (Additive White Gaussian Noise) and Rayleigh channel.

References

59, No. 1.


11. MATLAB, “HELP, Communication, toolbox, Block Interleaving”.


Index Terms

Computer Science

Wireless
Keywords

MIMO, OFDM, BER, ZF and MMSE EQUALIZERS