

Performance Of Equalized I-Q 16-QAM In Frequency Selective Fading

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Summary

The demand for high speed wireless systems dictates the use of bandwidth efficient modulation schemes. Trellis coded I-Q 16-QAM is shown here to be suitable for such applications. The performance of this scheme with decision feedback equalization is evaluated over a two-ray Rayleigh channel. Comparisons between the I-Q scheme with a conventional TCM scheme based on 8-PSK show coding gains of about 4 dB at a BER of 10^{-3}

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