Abstract

This paper presents simple and highly accurate approximated expression for the average symbol error rate of Differential Encoded Quadrature Phase Shift Keying (DEQPSK) and π/4 QPSK with MRC (Maximal Ratio Combining) diversity in κ-μ fading channel which is better suited for Line of Sight applications. Further the solution for average symbol error rate (ASER) of DEQPSK and π/4 QPSK is derived. ASER is plotted for different values of fading parameter and for Lth order MRC receiver. Furthermore, error performance of both modulation techniques has been analyzed for Nakagami-m, Rician, One sided Gaussian and Rayleigh fading as a special case.

References

2. D. Dixit, and P. R. Sahu. 2012 Performance of L-branch MRC receiver in κ-μ and μ-μ

**Index Terms**

Computer Science \hspace{2.5cm} Signal Processing

**Keywords**

ASER, DE-QPSK, $\pi/4$ QPSK