Abstract

Modern wireless communication system demands high data rate with acceptable error rate transmission and reception. OFDM a multi-carrier modulation technique will provide the solution
Analytical Error Rate Performance Evaluation of OFDM-QPSK System over Nakagami Distribution

for next generation wireless communication, so that it has been employed in numerous wireless standards. This paper presents new technique for the error rate of OFDM-QPSK system over Nakagami-\textit{m} and Nakagami-\textit{n} (Rice) fading channels, using characteristics function (CHF) based approach. To derive the SER expression for OFDM-QPSK system, exact PDF in integral form is utilized. Further the average SER have expressed in terms of the exponential and confluent hyper geometric functions.

References


**Index Terms**

Computer Science  
Signal Processing

**Keywords**

OFDM  
Nakagami-m Distribution  
Nakagami-n (Rice) Distribution

SER

Multipath Channel