

## BEHAVIOR OFDM SYSTEM WITH 16QAM, MSK AND $\pi/4$ DQPSK MODULATIONS UNDER IMPULSIVE NOISE

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- **ABSTRACT:** *This paper analyzes and compares the performance of the OFDM multiplex scheme combined with 16QAM, MSK and  $\pi/4$ DQPSK mapping separately. A model of impulsive noise, with Bernoulli–Gaussian statistics is used as medium interference, where the mean and variance of the Gaussian distribution can be changed using a parameter adjustment. In order to analyze the behavior under impulsive noise and compare the performance between the systems, curves of BER is presented. The simulations show that with the increase in the mean impulse noise leads to the saturation the curve of BER, keeping constant the total power of impulse noise in OFDM symbol period.*
- **KEYWORDS:** *Impulsive Noise, OFDM, Statistical Bernoulli-Gaussian.*

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