Abstract

Performance Analysis and Evaluation of TH-PPM and TH-BPSK under Dynamic Channel Environment

This paper presents analysis and evaluation of Ultra- Wideband Time-Hopping communication system with either Pulse Position Modulation (TH-PPM) Binary Phase Shift Keying (TH-BPSK). The channel model has been assumed as CM1 (line-of-sight) and/or CM3 (Non-line-of-sight) along with AWGN (IEEE 802.15.3a). In addition, the impact of all system parameters on its performance have been investigated and evaluated. This includes the number of pulses per each data frame, receiver model, single user and multiple users.