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Wi-Fi Interference Resistance to Jamming Attack

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Abstract

The paper looks at the problem of jamming attacks on wireless IEEE 802.11 networks. It can be seen from experiments that the use of broadband interference does not always give a better result than narrowband interference. When using narrowband interference with the imposition of pilot sub-carrier, the number of lost packets was 11%, and the average delivery time of a packet increased by an order of If the hot spot supports the ability to hop to a different frequency, or even to a different frequency range, then communication is interrupted for half a minute. Broadband interference reduces throughput by a factor of approximately 19 times, and packet loss averages 4%. © 2023 IEEE.

Author keywords

HackRF One; interference; jamming; Portapack; SDR; software-defined radio; Wi-Fi

About this paper

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