Abstract

IEEE 802. 11b & 802. 15. 4 operate at Industrial, Scientific & Medical (ISM) band of 2. 4 GHz. In most of the industrial monitoring systems, the WLAN & WSN co-exist & dealing with such a heterogeneous system forming a single network becomes a sensitive issue. The IEEE 802. 15. 4 wireless sensor devices are very much vulnerable to interference with IEEE 802. 11b WLAN standard devices. Though such a wireless communication makes the industrial monitoring simpler as compared to the wired system, IEEE 802. 15. 4 wireless sensor devices are very
much vulnerable to interference with IEEE 802.11 WLAN standard devices because of which the WLAN devices nearby may affect the WSN data. In this paper we present an alternative MIMO based VLC system replacing the WLAN system for reducing data packet loss.

References

- Sikora, "Coexistence of IEEE 802.15.4 (Zigbee) with IEEE 802.11 (WLAN), Bluetooth, and Microwave Ovens in 2.4 GHz ISM-Band", web document, http://www.ba-loerrach.de/stzedn

Index Terms

Computer Science

Circuits And Systems
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Wlan  Wsn  Throughput  Plr  Mimo  Vlc  Snr