

## Power Line Communication Integrated in a Wireless Power Transfer System: Feasibility of Surveillance Movement

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**Abstract :** This paper is based on exploring the possible opportunities and applications using Power Line Communication (PLC) for security and surveillance operations. Various research works are done for introducing PLC into onboard vehicle communication and networking (CAN, LIN etc.) and various international standards have been developed. Wireless power transfer (WPT) is also an emerging technology which is studied and tested for recharging purposes. In this work we present a system which embeds the detection and the response into one which eliminates the need for dedicated network for data transmission. Also we check the feasibility for integrating wireless power transfer system into this proposed security system for transmission of power to detection unit wirelessly from the response unit.

**Keywords :** power line communication, wireless power transfer, surveillance

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