PERFOMANCE EVALUTION OF POWER LINE COMMUNICATION USING SIGNAL WIRE TECHNIQUE

A project report submitted in partial fulfillment of the requirements
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IN
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CERTIFICATE

This is to certify that the project report entitled **"PERFORMANCE EVALUTION OF POWER LINE COMMUNICATION USING SIGNAL WIRE TECHNIQUE"** is a bonafide work submitted by **B LAKSHMANA RAO, B NAIDU, B HEMANTH KUMAR, G SATISH, K SIVA GANESH** in partial fulfillment of the requirements for the award of degree of

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ABSTRACT

During the last decade, the interest in the power line communication technologies was increased because of usage of existing power lines for the communication purpose and which can give high performance and it is cost effective. The major application for this power line communication are home automation, street light controlling etc. But now we can apply this technology to in the smartgird applications for grid automation.

We address the performance analysis of power line communication IC using FSK communication. The test has been performed for the commercially available low cost power line communication modem with signal wire technique over one kilo meter power line which consists of different noises, which are generated by the switching devices and electrical appliances. In this thesis, the performance is calculated by Signal to Noise Ratio (SNR) versus Bit Error Rate (BER) by using different coding techniques.

Key Words: Bit Error Rate (BER), Power Line Communication (PLC), Signal to Noise Ratio (SNR), Frequency Shift Keying (FSK).