## Abstract

Since the emergence of Power line communication, it has been steadily going undergoing great improvement, the aim of which has been to provide optimum performance. PLC has become an alternative choice for high-speed data transfer for communication. This technology has developed from narrow to broadband techniques are used to get high bit rates and more reliable communication.

The work presented here contributes to the research of developing an improved communication medium. Detailed PLC channel measurements are done ranging from primary cable parameters to frequency and phase responses for different cable length and configuration which are all important for PLC channel modeling. Results obtained are compared against existing models.