

Free virtual event

Webinar on the Potential of Power Line Communications for Smart Grid, Residential and Industry Applications

Organized by the IEEE ComSoc Technical Committee on Power Line Communications and the Technical Committee on Smart Grid Communications



Overview

Date: Oct 6, 2023. 15:00 CEST

Duration: 1 hour and 30 minutes.

Webinar rules:

Login: Use your full name when logging in, it will be visible to all participants. Your audio and video will be muted to minimize background noise.

Q&A: There will be 15 minutes (minimum) for discussion and Q&A after the third presentation. Please ask questions during the talk via the chat or, at the end of the talk, by "raising your hand".

Free registration

Register at: <https://bit.ly/PLCwebinarOct2023>

Summary

Power line communications (PLC) conveys information using existing electrical wires. It is a mature technology which can be used for high data-rate in-home applications, IoT, transport systems (in-vehicle, trains, etc.) and smart grid applications. PLC systems can be classified according to the employed frequency range: narrowband (NB) systems use the band 3-500 kHz and broadband (BB) systems employ the range 1.8-100 MHz.

NB PLC is widely used in smart metering, being the leading technology in some regions. However, it can also be used to manage local consumption/production balance, phase detection, cartography consolidation, among others.

BB PLC has been widely used in residential networking, complementing WiFi. In smart grid applications it has been employed to interconnect the secondary substations, but it is being recently employed also in smart metering (to accommodate the high data-rates required in some countries). Moreover, it can also be used to jointly perform communication and sensing, revealing information about the health of the power lines, and in many industrial applications.

Despite the numerous advantages of PLC, commonplaces inherited from the initial stages of this technology persist and may still show some scepticism. This webinar is aimed at discussing the state-of-the-art of both NB and BB PLC and its potentialities in smart grid, residential and industrial applications by means of three presentations:

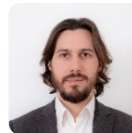
- Introduction to PLC
- Standardization, Applications and Challenges in NB PLC
- Standardization, Applications and Challenges in BB PLC

Speakers



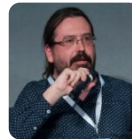
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Moderator



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