



Technical Report

**Powerline Telecommunications (PLT);  
Powerline communication recommendations for  
smart metering and home automation**

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Reference

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Keywords

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**ETSI**

650 Route des Lucioles  
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C  
Association à but non lucratif enregistrée à la  
Sous-Préfecture de Grasse (06) N° 7803/88

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## Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Powerline Telecommunications (PLT).

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# 1 Scope

The present document concentrates on recommendations for power line communication for smart meters and home automation using IP based transports along with DLMS/COSEM data models.

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## 2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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### 2.1 Normative references

The following referenced documents are necessary for the application of the present document.

Not applicable.

### 2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] CENELEC EN 50065-1: "Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz - Part 1: General requirements, frequency bands and electromagnetic disturbances".
- [i.2] Recommendation ITU-T G.9972: "Coexistence mechanism for wireline home networking transceivers".
- [i.3] IEC 62056-47: "Electricity metering - Data exchange for meter reading, tariff and load control - Part 47: COSEM transport layers for IPv4 networks".
- [i.4] IEEE 802.15.4<sup>TM</sup>: "IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 15.4: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPANs)".
- [i.5] Recommendation ITU-T G.993.2: "VDSL2 :Very High Speed Digital Subscriber Line transceivers 2".
- [i.6] Recommendation ITU-T G.9903: "Narrowband Orthogonal Frequency Division Multiplexing Power Line Communication Transceivers for G3-PLC Networks".
- [i.7] Recommendation ITU-T G.9904: "Narrowband orthogonal frequency division multiplexing power line communication transceivers for PRIME networks".
- [i.8] IEEE 1901.2<sup>TM</sup> - 2013: "IEEE Standard for Low-Frequency (less than 500kHz) Narrowband Power Line Communications for Smart grid Applications".
- [i.9] IEEE 1901<sup>TM</sup> - 2010: "IEEE Standard for Broadband over Power Line Networks: Medium Access Control and Physical Layer Specifications".