



TECHNICAL SPECIFICATION

**PowerLine Telecommunications (PLT);
Coexistence of Narrow Band PLT technologies operating
in the frequency bands 3kHz to 95 kHz, 95 kHz
to 125 kHz and 125 kHz to 140 kHz;
[IEEE Std 1901.2TM - 2013, IEEE Standard for Low-Frequency
(less than 500 kHz) Narrowband Power Line Communications
for Smart grid Applications, Section 10 Coexistence]**

Reference

DTS/PLT-00038

Keywords

endorsement, modem, powerline, smart grid

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 Specification (TS) has been produced by ETSI Technical Committee Powerline Telecommunications (PLT).

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document provides the requirements to support coexistence within the frequency band 3kHz up to 95 kHz, sub-band above 95 kHz up to 125 kHz and sub-band above 125 kHz up to 140 kHz as given in CENELEC EN 50065-1 [i.7] (also referred to as the CENELEC A band, B and C bands), for the following standards:

- IEEE Std 1901.2™ [1].
- IEC 61334-3-1 [i.1].
- IEC 61334-4-32 [i.2].
- IEC 61334-5-1 [i.3].
- IEC 61334-5-2 [i.4].
- ISO/IEC 14543-3-5 [i.5].
- ISO/IEC 14908-3 [i.6].

2 References

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

- [1] IEEE Std 1901.2™ - 2013: "IEEE Standard for Low-Frequency (less than 500 kHz) Narrowband Power Line Communications for Smart grid Applications", section 10 Coexistence.

2.2 Informative 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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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] IEC 61334-3-1: "Distribution automation using distribution line carrier systems - Part 3-1: Mains signalling requirements - Frequency bands and output levels".
- [i.2] IEC 61334-4-32: "Distribution automation using distribution line carrier systems - Part 4: Data communication protocols - Section 32: Data link layer - Logical link control (LLC)".
- [i.3] IEC 61334-5-1: "Distribution automation using distribution line carrier systems - Part 5-1: Lower layer profiles - The spread frequency shift keying (S-FSK) profile".
- [i.4] IEC 61334-5-2: "Distribution automation using distribution line carrier systems - Part 5-2: Lower layer profiles - Frequency shift keying (FSK) profile".

- [i.5] ISO/IEC 14543-3-5: "Information technology -- Home electronic system (HES) architecture -- Part 3-5: Media and media dependent layers -- Power line for network based control of HES Class 1".
- [i.6] ISO/IEC 14908-3: "Information technology -- Control network protocol -- Part 3: Power line channel specification".
- [i.7] 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".

Endorsement notice

All elements of Section 10, IEEE Std 1901.2TM [1] - 2013: "IEEE Standard for Low-Frequency (less than 500 kHz) Narrowband Power Line Communications for Smart grid Applications" coexistence apply.

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