



National Standards Authority of Ireland

STANDARD RECOMMENDATION

S.R. CLC/TR 50412-1:2007

ICS 33.100.20

**POWER LINE COMMUNICATION
APPARATUS AND SYSTEMS USED IN
LOW-VOLTAGE INSTALLATIONS IN THE
FREQUENCY RANGE 1,6 MHZ TO 30 MHZ --
PART 1: GENERAL**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales

<http://www.standards.ie>

*This Standard
Recommendation was
published under the authority
of the National Standards
Authority of Ireland and
comes into effect on:
8 June 2007*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
.....**

© NSAI 2007

Price Code D

Údarás um Chaighdeáin Náisiúnta na hÉireann

TECHNICAL REPORT
RAPPORT TECHNIQUE
TECHNISCHER BERICHT

CLC/TR 50412-1

May 2007

ICS 33.100.20

English version

**Power line communication apparatus and systems
used in low-voltage installations
in the frequency range 1,6 MHz to 30 MHz -
Part 1: General**

Equipements et systèmes de courant
porteur en ligne utilisés dans les
installations basse tension dans la bande
de fréquence 1,6 MHz à 30 MHz -
Part 1: Generalités

Kommunikationsgeräte
und -systeme auf elektrischen
Niederspannungsnetzen im
Frequenzbereich 1,6 MHz bis 30 MHz -
Teil 1: Allgemein

This Technical Report was approved by CENELEC on 2006-12-25.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

CLC/TR 50412-1:2007

- 2 -

Foreword

This Technical Report was prepared by SC 205A/WG 10, Mains communicating systems, of Technical Committee CENELEC TC 205, Home and Building Electronic Systems (HBES).

The text of the draft was submitted to vote and was approved by CENELEC as CLC/TR 50412-1 on 2006-12-25.

1 Scope

This Technical Report applies to electrical equipment using signals in the frequency range 1,6 MHz to 30 MHz to transmit information on low voltage electrical systems, either on the public supply system or within installations in consumers' premises.

It is a Technical Report covering the different standards for HF Power Line produced by SC205A.

It points to related documents about:

- frequency bands, coexistence and filters;
- limits for the terminal output levels in the operating band;
- limits for conducted and radiated disturbance (product & installation EMC);
- measurement methods.

It does not specify the signal modulation methods nor the coding methods nor functional features. Environmental requirements and tests are not included.

The requirements have been selected so as to ensure an adequate level of EMC and EMI for all apparatus (e.g. including residential, commercial, light industrial and industrial premises).

The severity levels required by this Technical Report may not cover extreme cases which may occur in any location but with a low probability of occurrence. In special cases situations will arise where the level of disturbances may exceed the levels specified in this Technical Report (e.g. where a hand-held transmitter is used in proximity to an apparatus). In these instances special mitigation measures may be required.

2 Normative references

Void

3 Structure of the EN/TR 50412 series

The EN/TR 50412 series will consist of the following parts:

CLC/TR 50412-1	Power line communication apparatus and systems used in low-voltage installations in the frequency range 1,6 MHz to 30 MHz – Part 1: General
EN 50412-2-1	Power line communication apparatus and systems used in low-voltage installations in the frequency range 1,6 MHz to 30 MHz – Part 2-1: Residential, commercial and industrial environment - Immunity requirements
EN 50412-2-2 ¹⁾	Power line communication apparatus and systems used in low-voltage installations in the frequency range 1,6 MHz to 30 MHz – Part 2-2: Residential, commercial and industrial environment - Emission requirements

¹⁾ At draft stage

EN 50412-3¹⁾ Power line communication apparatus and systems used in low-voltage installations in the frequency range 1,6 MHz to 30 MHz – Part 3: Low-voltage decoupling filters – Generic specification

The EN/TR 50412 series have two standards in common with the EN 50065 series (Low Frequency): EN 50065-4-2 and EN 50065-4-7.

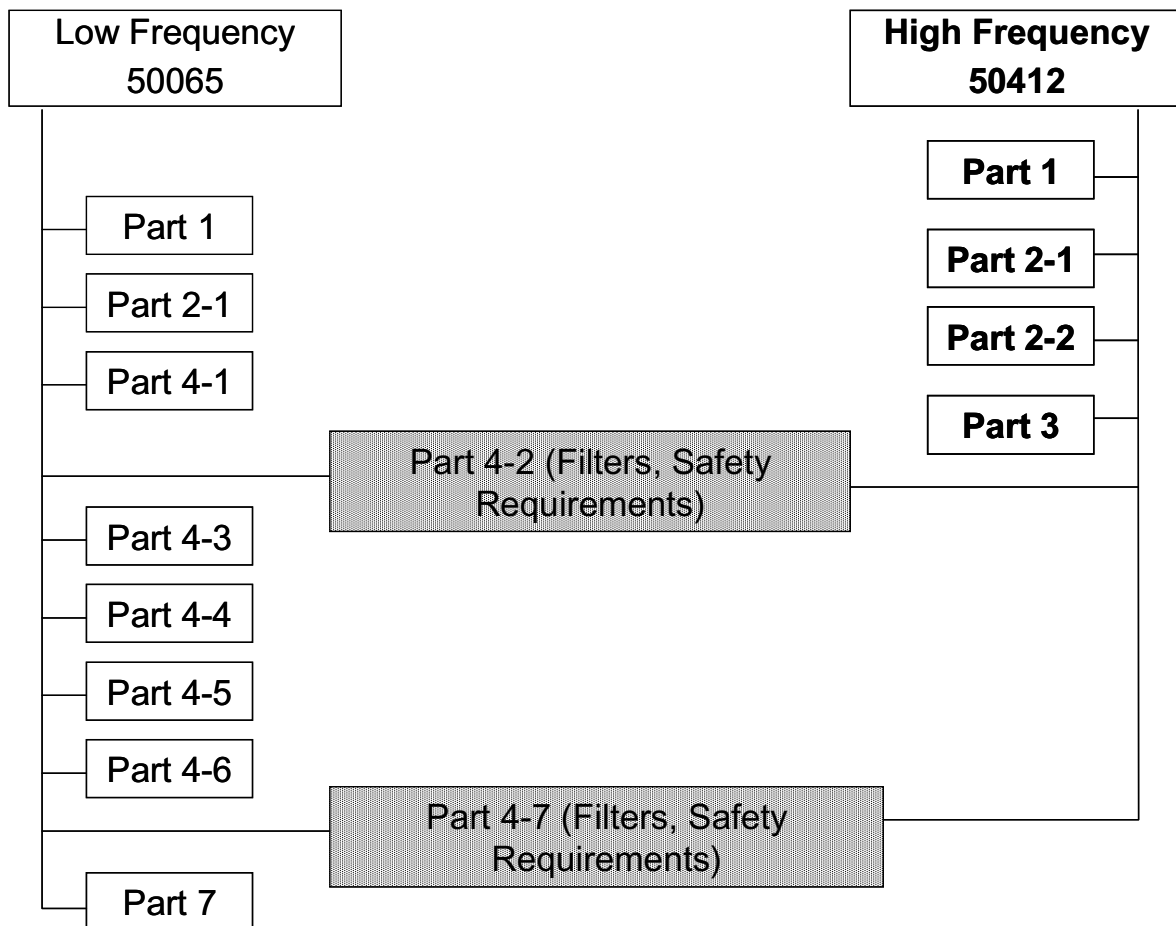


Figure 1 – 50412 and 50065 series

4 Definitions and abbreviations

4.1 Definitions

The definitions in IEC 60050-161 apply. The following particular definitions are used in this Technical Report.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-