BS EN 50561-1:2013

Incorporating corrigenda January 2015 and August 2015



BSI Standards Publication

Power line communication apparatus used in low-voltage installations — Radio disturbance characteristics — Limits and methods of measurement

Part 1: Apparatus for in-home use

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National foreword

This British Standard is the UK implementation of EN 50561-1:2013, incorporating corrigendum January 2015. Together with BS EN 55032:2015, it supersedes BS EN 55032:2012, which will be withdrawn on 5 May 2018. Together with BS EN 55032:2012, it supersedes BS EN 55022:2010, which will be withdrawn on 5 March 2017.

After 9 October 2016, BS EN 55032:2012 and BS EN 55022:2010 should no longer be used for the purposes of radio disturbance characteristics for in-home communication apparatus that use the low-voltage power installation as the transmission medium in the frequency range 1,606 5 MHz to 30 MHz.

The UK participation in its preparation was entrusted by Technical Committee GEL/210, EMC - Policy committee, to Subcommittee GEL/210/11, EMC product standards.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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28 February 2015	Implementation of CENELEC corrigendum January 2015: supersession details updated in CENELEC and National forewords
31 August 2015	Updated supersession information in national foreword to be in accordance with corresponding standards

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50561-1

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English version

Power line communication apparatus used in low-voltage installations - Radio disturbance characteristics - Limits and methods of measurement - Part 1: Apparatus for in-home use

Appareils de communication par courant porteur utilisés dans les installations basse tension - Caractéristiques de perturbations radioélectriques - Limites et méthodes de mesure - Partie 1: Appareils pour usage intérieur

Kommunikationsgeräte auf elektrischen Niederspannungsnetzen - Funkstöreigenschaften - Grenzwerte und Messverfahren - Teil 1: Geräte für die Verwendung im Heimbereich

This European Standard was approved by CENELEC on 2013-10-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

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Contents

Page

Foreword 4
Introduction 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 7
4 Requirement for conducted disturbances at AC mains power ports 8
5 Requirement for conducted disturbances at telecommunication/network ports 9
6 Requirements for conducted disturbances and communications signals at PLC ports 9
6.1 General requirements 9
6.2 Specific requirements for dynamic frequency exclusion 10
7 Requirement for radiated disturbances 11
8 Measurement conditions for PLC ports 11
9 Measurement methods and procedures for PLC ports 11
9.1 Conducted unsymmetrical disturbances 11
9.2 Dynamic power control 13
9.3 Cognitive frequency exclusion 14
9.4 Conducted asymmetric disturbances 15
10 Measurement uncertainty 15
Annex A (normative) Excluded frequency ranges 16
Annex B (normative) Impedance Stabilisation Network (ISN) for asymmetric disturbance measurements 18
Annex C (informative) Cognitive frequency exclusion 20
C.1 Abbreviations 20
C.2 PLC apparatus broadcast radio detection 20
C.3 Verification of the cognitive frequency exclusion implementation 21
C.4 Test signals 23
Annex ZZ (informative) Coverage of Essential Requirements of EU Directives 24
Bibliography 25

Figure 1 — Minimum requirements for a dynamically excluded frequency range 11

Figure 2 — Test arrangement for measuring the PLC port with an AMN 12

Figure 3 — Example coupling system 13

Figure 4 — Example test equipment arrangement for measuring PLC transmit signal levels 14

Figure 5 — Example schematic of 100 Ω to 50 Ω Balun 14

Figure 6 — Test arrangement for measuring the conducted asymmetric disturbances from the PLC port ... 15

Figure B.1 — Example circuit schematic for ISN 18

Figure B.2 — Arrangement for measurement of the ISN common mode decoupling attenuation (isolation) (excluding the Coupling System) 19

Table 1 — Limits for conducted disturbances 9

Table 2 — Maximum PLC transmit signal level between 1,606 5 MHz and 30 MHz 10

Table A.1 — Permanently excluded frequency ranges 16

Table A.2 — Permanent or dynamically excluded frequency ranges 17

Foreword

This document (EN 50561-1:2013) has been prepared by CLC/TC 210, "Electromagnetic compatibility (EMC)".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-10-09
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-10-09

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

The scope is extended to the whole radio-frequency range from 9 kHz to 400 GHz, but limits are formulated only in restricted frequency bands, which are considered sufficient to reach adequate emission levels to protect radio broadcast and telecommunication services and to allow other apparatus to operate as intended at reasonable distance.

This document partially supersedes EN 55022:2010 and EN 55032:2012.

Introduction

The European Committee for Electrotechnical Standardization (CENELEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent given in EN 50561-1:2013.

CENELEC takes no position concerning the evidence, validity and scope of this patent right.

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. CENELEC shall not be held responsible for identifying any or all such patent rights

1 Scope

This part of EN 50561 specifies limits and methods of measurement of radio disturbance characteristics for in-home communication apparatus that use the low-voltage power installation as the transmission medium. This part of EN 50561 applies to equipment that communicate over this medium in the frequency range 1,606 5 MHz to 30 MHz.

NOTE Similar equipment that communicate outside this frequency range is under study and will be covered by another European Standard.

Procedures are given for the measurement of signals generated by the equipment and limits are specified for the frequency range 9 kHz to 400 GHz. No measurement is required at frequencies where no limit is specified.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 55022:2010 + AC:2011, *Information technology equipment — Radio disturbance characteristics — Limits and methods of measurement (CISPR 22:2008, modified)*

EN 55016-1-1:2010, *Specification for radio disturbance and immunity measuring apparatus and methods — Part 1-1: Radio disturbance and immunity measuring apparatus — Measuring apparatus (CISPR 16-1-1:2010 + corrigendum Oct. 2011)*

EN 55016-1-2:2004, *Specification for radio disturbance and immunity measuring apparatus and methods — Part 1-2: Radio disturbance and immunity measuring apparatus — Ancillary equipment — Conducted disturbances (CISPR 16-1-2:2003)*

EN 55016-4-2:2004 [1)], *Specification for radio disturbance and immunity measuring apparatus and methods — Part 4-2: Uncertainties, statistics and limit modelling — Uncertainty in EMC measurements (CISPR 16-4-2:2003)*

The Radio Regulations, ITU, Edition of 2008

ITU-R Recommendation BS.560-3 [2)], *Radio-frequency protection ratios in LF, MF and HF broadcasting*

ITU-R Recommendation BS.703, *Characteristics of AM sound broadcasting reference receivers for planning purposes*

ITU-R Recommendation BS.1615 [3)], *"Planning parameters" for digital sound broadcasting at frequencies below 30 MHz*

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1) EN 55016-4-2:2004 is superseded by EN 55016-4-2:2011, *Specification for radio disturbance and immunity measuring apparatus and methods — Part 4-2: Uncertainties, statistics and limit modelling — Measurement instrumentation uncertainty (CISPR 16-4-2:2011)*

2) BS.560-3 is superseded by BS.560-4, *Radio-frequency protection ratios in LF, MF and HF broadcasting*

3) BS.1615 is superseded by BS.1615-1, *"Planning parameters" for digital sound broadcasting at frequencies below 30 MHz*