



BSI Standards Publication

Electromagnetic compatibility (EMC)

Part 6-4: Generic standards – Emission standard for
industrial environments (IEC 61000-6-4:2018)

National foreword

This British Standard is the UK implementation of EN IEC 61000-6-4:2019. It is identical to IEC 61000-6-4:2018. It supersedes BS EN 61000-6-4:2007+A1:2011, which will be withdrawn on 20 September 2022.

The UK participation in its preparation was entrusted to Technical Committee GEL/210/11, EMC - Standards Committee.

BSI, as a member of CENELEC, is obliged to publish EN IEC 61000-6-4:2019 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval.

The UK committee voted against this standard as it considers that Annex A (informative), Testing of DC powered systems, should contain normative text and that the limits provided should be normative requirements.

A list of organizations represented on this committee 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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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
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English Version

Electromagnetic compatibility (EMC) - Part 6-4: Generic
standards - Emission standard for industrial environments
(IEC 61000-6-4:2018)

Compatibilité électromagnétique (CEM) - Partie 6-4:
Normes génériques - Norme sur l'émission pour les
environnements industriels
(IEC 61000-6-4:2018)

Elektromagnetische Verträglichkeit (EMV) - Teil 6-4:
Fachgrundnormen - Störaussendung für Industriebereiche
(IEC 61000-6-4:2018)

This European Standard was approved by CENELEC on 2018-03-14. 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.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document CIS/H/339A/FDIS, future edition 3 of IEC 61000-6-4, prepared by IEC/SC H of CISPR "Limits for the protection of radio services" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61000-6-4:2019.

The following dates are fixed:

- latest date by which the document has to be (dop) 2020-03-20
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2022-09-20
standards conflicting with the
document have to be withdrawn

This document supersedes EN 61000-6-4:2007 and EN 61000-6-4:2007/A1:2011.

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

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.

Endorsement notice

The text of the International Standard IEC 61000-6-4:2018 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61000-6-1	NOTE	Harmonized as EN 61000-6-1.
IEC 61000-6-3	NOTE	Harmonized as EN 61000-6-3.
IEC 61158 (series)	NOTE	Harmonized as EN 61158 (series).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-161	1990 ¹	International Electrotechnical Vocabulary (IEV) -- Chapter 161: Electromagnetic compatibility	-	-
IEC 61000-4-20	2010	Electromagnetic compatibility (EMC) -- Part 4-20: Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides	EN 61000-4-20	2010
CISPR 11 (mod)	2015	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2016
+ A1	2016		+ A1	2017
CISPR 14-1	2016	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2017
CISPR 16-1-1	2015	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	-	-
CISPR 16-1-2	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus - Coupling devices for conducted disturbance measurements	EN 55016-1-2	2014

¹ Dated as no equivalent European Standard exists.

EN IEC 61000-6-4:2019 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
CISPR 16-1-4	2010	Specification for radio disturbance and immunity measuring apparatus and methods -- Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements	EN 55016-1-4	2010
+ A1	2012		+ A1	2012
+ A2	2017		+ A2	2017
CISPR 16-1-6	2014	Specification for radio disturbance and immunity measuring apparatus and methods -- Part 1-6: Radio disturbance and immunity measuring apparatus - EMC-antenna calibration	EN 55016-1-6	2015
+ A1	2017		+ A1	2017
CISPR 16-2-1	2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	EN 55016-2-1	2014
+ A1	2017		+ A1	2017
CISPR 16-2-3	2016	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	EN 55016-2-3	2017
CISPR 16-4-2	2011	Specification for radio disturbance and immunity measuring apparatus and methods -- Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty	EN 55016-4-2	2011
+ A1	2014		+ A1	2014
CISPR 32	2015	Electromagnetic compatibility of multimedia equipment - Emission requirements	EN 55032	2015

Annex ZZ (informative)

Relationship between this European standard and the essential requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under the European Commission standardisation request C(2016) 7641 final of 30.11.2016², ('M/552'), as regards harmonised standards in support of Directive 2014/30/EU relating to electromagnetic compatibility, to provide one voluntary means of conforming to essential requirements of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZ.1 – Correspondence between this European standard and the
Essential Requirements set out in Directive 2014/30/EU [2014 OJ L96]**

Essential requirements of Directive 2014/30/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex I. 1(a) (electromagnetic disturbances)	9 Emission requirements	The limits apply in combination with the relevant measuring method and operating conditions.

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

² COMMISSION IMPLEMENTING DECISION C(2016) 7641 final of 30.11.2016 on a standardisation request to the European Committee for Standardisation, to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards harmonised standards in support of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMAGNETIC COMPATIBILITY (EMC) –**Part 6-4: Generic standards –
Emission standard for industrial environments**

FOREWORD

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International Standard IEC 61000-6-4 has been prepared by CISPR subcommittee H: Limits for the protection of radio services.

This third edition cancels and replaces the second edition published in 2006 and Amendment 1:2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) possible future requirements on DC ports;
- b) possible future radiated polarity specific emission limits within a FAR;
- c) the definition of which average detector is used for emission measurements at frequencies above 1GHz and that results using a peak detector are acceptable for all measurements;
- d) the definition of different EUT test arrangements.