



BSI Standards Publication

Product standard to demonstrate the compliance of wireless communication devices with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 30 MHz to 6 GHz: hand-held and body mounted devices in close proximity to the human body

This is a preview of BS EN 50566:2017+A1:2023. [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 50566:2017+A1:2023. It supersedes BS EN 50566:2017, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CENELEC text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee GEL/106, Human exposure to low frequency and high frequency electromagnetic radiation.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
31 August 2023	Implementation of CENELEC amendment A1:2023

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EUROPÄISCHE NORM

August 2023

ICS 17.240; 33.070.01

English Version

Product standard to demonstrate the compliance of wireless communication devices with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 30 MHz to 6 GHz: hand-held and body mounted devices in close proximity to the human body

Norme de produit pour démontrer la conformité des dispositifs de communication sans fil aux restrictions de base et aux valeurs limites d'exposition relatives à l'exposition des personnes aux champs électromagnétiques dans la plage de fréquences de 30 MHz à 6 GHz: dispositifs tenus à la main ou portés à proximité immédiate du corps humain

Produktnorm zum Nachweis der Übereinstimmung von schnurlosen Kommunikationsgeräten mit den Basisgrenzwerten und Expositionsgrenzwerten für die Exposition von Personen gegenüber elektromagnetischen Feldern im Frequenzbereich von 30 MHz bis 6 GHz: In enger Nachbarschaft zum menschlichen Körper handgehaltene und am Körper getragene Geräte

This amendment A1 modifies the European Standard EN 50566:2017; it was approved by CENELEC on 2023-07-31. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Türkiye 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

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European foreword

This document (EN 50566:2017) has been prepared by CLC/TC 106X “Electromagnetic fields in the human environment”.

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) 2024-07-31
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2026-07-31

This document supersedes EN 50566:2013.

EN 50566:2017 includes the following significant technical changes with respect to EN 50566:2013:

- 1) the standard requires that the assessment has to take into account all reasonably foreseeable operating conditions (Clause 4);
- 2) the standard covers equipment intended for use only by workers as well as equipment intended for use by the general public and different limits are given for each case (Clause 5).
- A1** 3) the inclusion of the new normative document EN IEC 62209-3:2019 and associated procedures. **A1**

A1 This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s). **A1**

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

1 Scope

This product standard applies to wireless communication devices used at distances up to and including 200 mm from the human body, i.e. when held in the hand or in front of the face, mounted on the body, combined with other transmitting or non-transmitting devices or accessories (e.g. belt-clip, camera or Bluetooth add-on), or integrated into garments. The applicable frequency range is from 30 MHz to 6 GHz.

The objective of this standard is to demonstrate the compliance of such devices with the basic restrictions and exposure limit values related to human exposure to radio frequency electromagnetic fields.

A1 Text deleted. **A1**

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.

- A1** EN 62209-2:2010¹, *Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices — Human models, instrumentation, and procedures — Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz) (IEC 62209-2:2010)* **A1**

Council Recommendation 1999/519/EC of 12 July 1999 *on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) (Official Journal L 199, 30.6.1999, p. 59-70)*

- A1** EN IEC 62209-3:2019, *Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices — Part 3: Vector measurement-based systems (Frequency range of 600 MHz to 6 GHz) (IEC 62209-3:2019)* **A1**

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

basic restrictions

restrictions on exposure of the general public to electric, magnetic, and electromagnetic fields that are based directly on established health effects and biological considerations

Note 1 to entry: Concerning the frequency range of this standard, the physical quantity used is the Specific Absorption Rate (SAR).

3.2

exposure limits values

restrictions on exposure of workers to electric, magnetic and electromagnetic fields that are based directly on established health effects and biological considerations

Note 1 to entry: Concerning the frequency range of this standard, the physical quantity used is the Specific Absorption Rate (SAR).

¹ As amended by EN 62209-2:2010/A1:2019.