

**TOOTESTANDARD JUHTMEVABADE SIDESEADMETE
NÕUETELE VASTAVUSE TÕENDAMISEKS, INIMESELE
TOIMIVATE ELEKTROMAGNETVÄLJADE PÕHIPIIRANGUD
JA KOKKUPUUTE PIIRNORMID SAGEDUSALAS 300 MHZ
KUNI 6 GHZ: KÕRVA ÄÄRES HOITAVAD SEADMED**

**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 300 MHz to 6 GHz: devices used next to the
ear**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN 50360:2017+A1:2023 sisaldb Euroopa standardi EN 50360:2017 ja selle muudatuse A1:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 50360:2017+A1:2023 consists of the English text of the European standard EN 50360:2017 and its amendment A1:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.10.2017, muudatus A1 04.08.2023.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 06.10.2017, for A1 04.08.2023.
Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega [A1] [A1] . Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by amendment A1 is indicated in the text by tags [A1] [A1] . The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 33.070.01

Standardite reproduutseerimise ja levitamise õigus kuulub Eesti Standardimis- ja Akrediteerimiskeskusele Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardimis- ja Akrediteerimiskeskuse kirjaliku loata on keelatud. Kui Teil on küsimusi standardite autoriõiguse kaitse kohta, võtke palun ühendust Eesti Standardimis- ja Akrediteerimiskeskusega: Koduleht www.evs.ee ; telefon 605 5050; e-post info@evs.ee The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation and Accreditation No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation and Accreditation. If you have any questions about standards copyright protection, please contact the Estonian Centre for Standardisation and Accreditation: Homepage www.evs.ee ; phone +372 605 5050; e-mail info@evs.ee

**EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM**

EN 50360 + A1

October 2017, August 2023

ICS 33.070.01

Supersedes EN 50360:2001

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 300 MHz to 6 GHz: devices used next to the ear

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 300 MHz à 6 GHz: dispositifs utilisés à proximité de l'oreille

Produktnorm zum Nachweis der Übereinstimmung von schnurlosen Kommunikationsgeräten mit den Basisgrenzwerten und Expositionsgrenzwerten für die Exposition von Personen gegenüber elektromagnetischen Feldern im Frequenzbereich von 300 MHz bis 6 GHz: Geräte, die in enger Nachbarschaft zum Ohr benutzt werden

This European Standard was approved by CENELEC on 2017-07-24. Amendment A1 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 European Standard and its 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 European Standard and its Amendment A1 exist 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

Contents	Page
European foreword.....	3
[A1] Amendment A1 European foreword [A1]	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Exposure conditions	6
5 Normative limits	6
6 Evaluation of compliance	6
7 Assessment uncertainty.....	7
8 Documentation	7
9 Assessment of compliance	7
[A1] Annex ZZ (informative) Relationship between this European Standard and the essential requirements of Directive 2014/53/EU [2014 OJ L153] aimed to be covered [A1]	8
Bibliography.....	9

European foreword

This document (EN 50360:2017) 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 (dop) 2018-07-24 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2020-07-24 with this document have to be withdrawn

This document supersedes EN 50360:2001.

EN 50360:2017 includes the following significant technical changes with respect to EN 50360:2001:

- 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).
- 3) inclusion of the new normative document EN IEC 62209-3:2019. [A1]

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.

[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.

[A1] Amendment A1 European foreword

This document (EN 50360:2017/A1:2023) 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 (dop) 2024-07-31 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2026-07-31 with this document have to be withdrawn

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 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).

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

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website. [\[A1\]](#)

1 Scope

This product standard applies to wireless communication devices used in close proximity to the human ear (e.g. mobile phones, wireless headsets). The applicable frequency range is from 300 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~~ deleted text ~~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.

EN 62209-1:2016, *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 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz)* (IEC 62209 1:2016)

~~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~~

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~~ deleted text ~~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 limit 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).