



SLOVENSKI STANDARD

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Elektroakustika - Slušni aparati - Meritve tehničnih karakteristik slušnih aparatov

iTeh STANDARD PREVIEW

Electroacoustics - Hearing aids - Measurement of the performance characteristics of hearing aids

[SIST EN 60118-0:2015](https://standards.iteh.ai/catalog/standards/sist/b970c039-f463-4050-b825-a84313a8b828/sist-en-60118-0-2015)

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Electroacoustique Appareils de correction auditive Mesure des caractéristiques de performance des corrections auditives

Ta slovenski standard je istoveten z: EN 60118-0:2015

ICS:

11.180.15	Pripomočki za gluhe osebe in osebe z okvaro sluha	Aids for deaf and hearing impaired people
17.140.50	Elektroakustika	Electroacoustics

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EUROPEAN STANDARD

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August 2015

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Supersedes EN 60118-0:1993, EN 60118-1:1995, EN 60118-2:1995, EN 60118-6:1999

English Version

Electroacoustics - Hearing aids - Part 0: Measurement of the performance characteristics of hearing aids (IEC 60118-0:2015)

Electroacoustique - Appareils de correction auditive - Partie 0: Mesure des caractéristiques fonctionnelles des appareils de correction auditive
(IEC 60118-0:2015)

Akustik - Hörgeräte - Teil 0: Messung der Leistungsmerkmale von Hörgeräten
(IEC 60118-0:2015)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 60118-0:2015**European foreword**

The text of document 29/867A/FDIS, future edition 3 of IEC 60118-0, prepared by IEC TC 29, Electroacoustics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60118-0:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-04-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-07-14

This document supersedes EN 60118-0:1993, EN 60118-1:1995, EN 60118-2:1995, EN 60118-6:1999.

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In the official version, for Bibliography, the following note has to be added for the standard indicated :

<u>SIST EN 60118-0:2015</u>		
IEC 60068 (series)	NOTE	Harmonized as EN 60068 (series).
IEC 60118-7:2005	NOTE	Harmonized as EN 60118-7:2005.
IEC 60118-8:2005	NOTE	Harmonized as EN 60118-8:2005.
IEC 60118-12	NOTE	Harmonized as EN 60118-12.
IEC 60118-15	NOTE	Harmonized as EN 60118-15.
IEC 60318-1	NOTE	Harmonized as EN 60318-1.
IEC 60118-15	NOTE	Harmonized as EN 60118-15.
IEC 60318-4:2010	NOTE	Harmonized as EN 60318-4:2010.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When 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 60318-5	-	Electroacoustics - Simulators of human head and ear -- Part 5: 2 cm ³ coupler for the measurement of hearing aids and earphones coupled to the ear by means of ear inserts	EN 60318-5	-
ISO 3	-	Preferred numbers; Series of preferred numbers	-	-

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IEC 60118-0

Edition 3.0 2015-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Electroacoustics – Hearing aids –
Part 0: Measurement of the performance characteristics of hearing aids

Électroacoustique – Appareils de correction auditive –
Partie 0: Mesure des caractéristiques fonctionnelles des appareils de correction auditive

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 17.140.50

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CONTENTS

FOREWORD.....	5
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions	8
4 General conditions.....	12
4.1 Acoustic test method	12
4.2 Acoustic coupler.....	13
4.3 Measurement frequency range	13
4.4 Reporting of data	13
5 Test enclosure and test equipment.....	13
5.1 General.....	13
5.2 Unwanted stimuli in the test enclosure	13
5.3 Sound source.....	13
5.4 Measurement system for the measurement of the sound pressure level and harmonic distortion produced by a hearing aid	14
5.5 Direct-current measuring system	14
5.6 Magnetic field source for ETLs and MASL measurements.....	15
6 Test conditions	15
6.1 General.....	15
6.2 Control of the sound field	16
6.3 Measurement configuration for directional hearing aids	17
6.4 Normal operating conditions for a hearing aid.....	18
6.4.1 General.....	18
6.4.2 Battery or supply voltage.....	18
6.4.3 Settings of controls	19
6.4.4 Ambient conditions.....	19
6.4.5 Sound outlet system.....	19
6.4.6 Accessories	20
7 Test procedures	20
7.1 Frequency response curves.....	20
7.2 OSPL90 frequency response curve.....	20
7.3 Full-on gain response curve	21
7.4 Basic frequency response curve	21
7.4.1 Test procedure.....	21
7.4.2 Frequency range.....	22
7.4.3 Reference test gain (RTG)	23
7.5 Total harmonic distortion	23
7.6 Equivalent input noise	23
7.7 Battery current	23
7.8 Measurements for hearing aids having induction pick-up coil.....	24
7.8.1 General	24
7.8.2 Equivalent test loop sensitivity (ETLS).....	24
7.8.3 Maximum HFA magneto-acoustical sensitivity level (HFA MASL) of induction pick-up coil.....	24
8 Characteristics of electrical input circuits for hearing aids	24
8.1 Electrical characteristics.....	24
8.1.1 General	24

8.1.2	Input impedance	25
8.1.3	Input sensitivity	25
8.2	Mechanical characteristics and electrical function of connector system for electrical input.....	25
9	Additional optional test procedures	25
9.1	General.....	25
9.2	Effects of tone control and gain control	25
9.2.1	Basic frequency response: effect of tone control	25
9.2.2	Frequency response: effect of gain control position.....	25
9.2.3	Characteristics of the gain control	26
9.3	Intermodulation distortion	26
9.4	Effects of variation of battery or supply voltage and internal resistance	26
9.4.1	Full-on gain.....	26
9.4.2	OSPL90	27
9.4.3	Total harmonic distortion	27
9.4.4	Total intermodulation distortion	27
9.5	Equivalent input noise in one-third-octave bands	27
9.6	Additional measurements for hearing aids having induction pick-up coil.....	30
9.6.1	General	30
9.6.2	Basic frequency response	30
9.6.3	Frequency response with full-on gain control setting	30
9.6.4	Effect of gain control position on frequency response.....	30
9.6.5	Harmonic distortion	31
9.7	Additional measurements for hearing aids having induction pick-up coil for use with a telephone	31
9.7.1	General	31
9.7.2	SPLITS response curve.....	32
9.7.3	HFA-SPLITS	32
9.7.4	Relative simulated equivalent telephone sensitivity (RSETS).....	32
9.8	Additional measurements applying to AGC hearing aids.....	33
9.8.1	General	33
9.8.2	Steady-state input-output characteristics	33
9.8.3	Dynamic AGC characteristics (attack and release time)	34
9.9	Additional optional measurements with ear simulator, according to IEC 60318-4.....	34
9.9.1	General	34
9.9.2	Output sound pressure level frequency response curve for an input sound pressure level of 90 dB	34
9.9.3	Full-on gain response curve	34
9.9.4	Basic frequency response curve	34
9.9.5	Presentation of data	34
10	Maximum permitted expanded uncertainty of measurements.....	34
	Bibliography	36
	Figure 1 – Example of test arrangement for behind-the-ear hearing aid	16
	Figure 2 – Example of test arrangement for in-the-ear hearing aid	17
	Figure 3 – Example of test arrangement for directional hearing aid	18
	Figure 4 – Example of OSPL90 curve and basic frequency response curve	21

Figure 5 – Example of determination of frequency range from basic frequency response curve	22
Figure 6 – Example of hearing aid acoustic gain	28
Figure 7 – Example of hearing aid output noise and test equipment noise	29
Figure 8 – Hearing aid equivalent input noise and ambient noise	29
Figure 9 – Telephone magnetic field simulator (TMFS)	31
Figure 10 – Example of hearing aids on TMFS for SPLITS test	32
Figure 11 – Example of a steady-state input-output characteristic	33
Table 1 – Resistors and open circuit voltages for zinc-air battery simulators.....	19
Table 2 – Distortion test frequencies and input sound pressure levels	23
Table 3 – Values of U_{\max} for basic measurements.....	35

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROACOUSTICS –
HEARING AIDS –****Part 0: Measurement of the performance
characteristics of hearing aids**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60118-0 has been prepared by IEC technical committee 29: Electroacoustics.

This third edition cancels and replaces the second edition published in 1983 and its Amendment 1:1994 as well as IEC 60118-1:1995, Amendment 1:1998, IEC 60118-2:1983, Amendment 1:1993, Amendment 2:1997 and IEC 60118-6:1999. This edition constitutes a technical revision.

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

- a) the use of an acoustic coupler according to IEC 60318-5;
- b) the addition of measurements for automatic gain control circuits, for induction pick-up coil inputs and for electrical inputs.

The text of this standard is based on the following documents:

FDIS	Report on voting
29/867A/FDIS	29/874/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60118 series, published under the general title *Electroacoustics – Hearing aids*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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ELECTROACOUSTICS – HEARING AIDS –

Part 0: Measurement of the performance characteristics of hearing aids

1 Scope

This part of IEC 60118 gives recommendations for the measurement of the performance characteristics of air conduction hearing aids based on a free field technique and measured with an acoustic coupler.

This part of IEC 60118 is applicable to the measurement and evaluation of the electroacoustical characteristics of hearing aids, for example for type testing and manufacturer data sheets.

The test results obtained by the methods specified in this part of IEC 60118 will express the performance under conditions of the test and may deviate substantially from the performance of the hearing aid under actual conditions of use.

This part of IEC 60118 uses an acoustic coupler according to IEC 60318-5 which is only intended for loading a hearing aid with a specified acoustic impedance and is not intended to model the sound pressure in a person's ear. The use of this acoustic coupler will yield different results from those obtained using the occluded ear simulator of IEC 60318-4 as used in former editions of IEC 60118-0.

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For the measurement of the performance characteristics of hearing aids for simulated *in situ* working conditions, IEC 60118-8 can be used. For measurement of hearing aids under typical user settings and using a speech-like signal, IEC 60118-15 can be used.

For the measurement of the performance characteristics of hearing aids for production, supply and delivery quality-assurance purposes, IEC 60118-7 can be used. The frequency range has been extended to 8 kHz in this part of IEC 60118 as opposed to 5 kHz in IEC 60118-7.

Though the number of measurements covered by this part of IEC 60118 is limited, it is not intended that all measurements described herein are mandatory.

In cases of custom-made in-the-ear instruments, the data supplied by the manufacturer applies only to the particular hearing aid being tested.

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.

IEC 60318-5, *Electroacoustics – Simulators of human head and ear – Part 5: 2 cm³ coupler for the measurement of hearing aids and earphones coupled to the ear by means of ear inserts*

ISO 3, *Preferred numbers -- Series of preferred numbers*