



SLOVENSKI STANDARD
SIST EN 61672-3:2008
01-februar-2008

9`Y_kfcU_i gh_UËAYf]b_]njc bY`U_cgh]!" "XY.FYXbc`dfYg_i ýUb`Y`f197`*`%`+&!
'`.&\$*\$Ł

Electroacoustics - Sound level meters - Part 3: Periodic tests (IEC 61672-3:2006)

Elektroakustik - Schallpegelmesser - Teil 3: Periodische Einzelprüfung (IEC 61672-3:2006)

Electroacoustique - Sonomètres - Partie 3: Essais périodiques (IEC 61672-3:2006)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 61672-3:2006

<https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-036bd7c351d0/sist-en-61672-3-2008>

ICS:

17.140.50

SIST EN 61672-3:2008

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61672-3:2008

<https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-036bd7c351d0/sist-en-61672-3-2008>

English version

**Electroacoustics -
Sound level meters
Part 3: Periodic tests
(IEC 61672-3:2006)**

Electroacoustique -
Sonomètres
Partie 3: Essais périodiques
(CEI 61672-3:2006)

Elektroakustik -
Schallpegelmesser
Teil 3: Periodische Einzelprüfung
(IEC 61672-3:2006)

iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 2006-11-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 29/607/FDIS, future edition 1 of IEC 61672-3, prepared by IEC TC 29, Electroacoustics, in cooperation with the International Organization of Legal Metrology (OIML), was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61672-3 on 2006-11-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2007-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61672-3:2006 was approved by CENELEC as a European Standard without any modification.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61672-3:2008](https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-036bd7c351d0/sist-en-61672-3-2008)

<https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-036bd7c351d0/sist-en-61672-3-2008>

Annex ZA

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60942	- ¹⁾	Electroacoustics - Sound calibrators	EN 60942	2003 ²⁾
IEC 61094-6	- ¹⁾	Measurement microphones Part 6: Electrostatic actuators for determination of frequency response	EN 61094-6	2005 ²⁾
IEC 61672-1	2002	Electroacoustics - Sound level meters Part 1: Specifications	EN 61672-1	2003
IEC 61672-2	2003	Electroacoustics - Sound level meters Part 2: Pattern evaluation tests	EN 61672-2	2003
BIPM, IEC, IFCC, ISO, IUPAC, IUPAP and OIML	1995	Guide to the expression of uncertainty in measurement (GUM)	-	-
BIPM, IEC, IFCC, ISO, IUPAC, IUPAP and OIML	1993	International vocabulary of basic and general terms in metrology (VIM)	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61672-3:2008

<https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-036bd7c351d0/sist-en-61672-3-2008>

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

61672-3

Première édition
First edition
2006-10

Électroacoustique –
Sonomètres –

Partie 3:
Essais périodiques

iTeh STANDARD PREVIEW

(standards.iteh.ai)
Electroacoustics –
Sound level meters –

SIST EN 61672-3:2008

<https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-136bd7c351d0/sist-en-61672-3-2008>

Part 3:
Periodic tests

© IEC 2006 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

Q

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

FOREWORD.....	5
1 Scope.....	9
2 Normative references.....	9
3 Submission for testing	11
4 Conformance.....	13
5 Preliminary inspection.....	13
6 Power supply.....	15
7 Environmental conditions	15
8 General test requirements.....	15
9 Indication at the calibration check frequency	15
10 Self-generated noise.....	17
11 Acoustical signal tests of a frequency weighting	19
12 Electrical signal tests of frequency weightings.....	23
13 Frequency and time weightings at 1 kHz	25
14 Level linearity on the reference level range	25
15 Level linearity including the level range control.....	27
16 Toneburst response.....	27
17 Peak C sound level.....	29
18 Overload indication.....	31
19 Documentation	31

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROACOUSTICS – SOUND LEVEL METERS –**Part 3: Periodic tests**

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61672-3 has been prepared by IEC technical committee 29: Electroacoustics, in cooperation with the International Organization of Legal Metrology (OIML).

The text of this part of IEC 61672 is based on the following documents:

FDIS	Rapport de vote
29/607/FDIS	29/614/RVD

Full information on the voting for the approval of this part of IEC 61672 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.

At the time of publication of this standard, the IEC 61672 series was scheduled to consist at least of the following parts under the general title *Electroacoustics – Sound level meters*:

Part 1: Specifications

Part 2: Pattern evaluation tests,

Part 3: Periodic tests.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site 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.

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

SIST EN 61672-3:2008

<https://standards.iteh.ai/catalog/standards/sist/3844c872-885b-4064-a9cb-036bd7c351d0/sist-en-61672-3-2008>

ELECTROACOUSTICS – SOUND LEVEL METERS –

Part 3: Periodic tests

1 Scope

1.1 This part of IEC 61672 describes procedures for periodic testing of conventional, integrating-averaging, and integrating sound level meters conforming to the class 1 or class 2 requirements of IEC 61672-1:2002. The aim of the standard is to ensure that periodic testing is performed in a consistent manner by all testing laboratories.

1.2 The purpose of periodic testing is to assure the user that the performance of a sound level meter conforms to the requirements of IEC 61672-1:2002 for a limited set of key tests and for the environmental conditions under which the tests were performed.

1.3 The extent of the tests in this part of IEC 61672 is deliberately restricted to the minimum considered necessary for periodic tests.

1.4 Periodic tests described in this part of IEC 61672 apply to sound level meters for which the model has been, or has not been, pattern approved by an independent testing organization responsible for pattern approvals and in accordance with the test procedures of IEC 61672-2:2003. Periodic tests described in this part of IEC 61672 also apply to sound level meters for which the manufacturer claims conformance to the requirements of IEC 61672-1. Because of the limited extent of the periodic tests, if evidence of pattern approval is not publicly available no general conclusion about conformance to the requirements of IEC 61672-1:2002 can be made, even if the results of the periodic tests conform to all applicable requirements of this part of IEC 61672.

2 Normative references

The following referenced documents are indispensable for application 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.

IEC 60942, *Electroacoustics – Sound calibrators*

IEC 61094-6, *Measurement microphones – Part 6: Electrostatic actuators for determination of frequency response*

IEC 61672-1:2002, *Electroacoustics – Sound level meters – Part 1: Specifications*

IEC 61672-2:2003, *Electroacoustics – Sound level meters – Part 2: Pattern evaluation tests*

BIPM, IEC, IFCC, ISO, IUPAC, IUPAP and OIML:1995, *Guide to the expression of uncertainty in measurement (GUM)*

BIPM, IEC, IFCC, ISO, IUPAC, IUPAP and OIML:1993, *International vocabulary of basic and general terms in metrology*. ISBN 92-67-01075-1