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Standards

Irish Standard  
I.S. EN IEC 62884-4:2019

Measurement techniques of piezoelectric,  
dielectric and electrostatic oscillators -  
Part 4 : Short-term frequency stability  
test methods

**I.S. EN IEC 62884-4:2019**

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## National Foreword

I.S. EN IEC 62884-4:2019 is the adopted Irish version of the European Document EN IEC 62884-4:2019, Measurement techniques of piezoelectric, dielectric and electrostatic oscillators - Part 4 : Short-term frequency stability test methods

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EUROPEAN STANDARD

**EN IEC 62884-4**

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English Version

**Measurement techniques of piezoelectric, dielectric and electrostatic oscillators - Part 4 : Short-term frequency stability test methods  
(IEC 62884-4:2019)**

Techniques de mesure des oscillateurs piézoélectriques, diélectriques et électrostatiques - Partie 4: Méthodes d'essai de stabilité à court-terme de la fréquence  
(IEC 62884-4:2019)

Messverfahren für piezoelektrische, dielektrische und elektrostatische Oszillatoren - Teil 4: Prüfverfahren für die Kurzzeit-Frequenzstabilität  
(IEC 62884-4:2019)

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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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## **EN IEC 62884-4:2019 (E)**

### **European foreword**

The text of document 49/1277/CDV, future edition 1 of IEC 62884-4, prepared by IEC/TC 49 "Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62884-4:2019.

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) 2020-03-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-06-10

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

IEC 60068-1                      NOTE                      Harmonized as EN 60068-1

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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

| <u>Publication</u> | <u>Year</u> | <u>Title</u>   | <u>EN/HD</u>   | <u>Year</u> |
|--------------------|-------------|--|----------------|-------------|
| IEC 60027          | series      | Letters symbols to be used in electrical technology - Part 1: General  | -              | series      |
| IEC 60050-561      | -           | International Electrotechnical Vocabulary - Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection  | -              | -           |
| IEC 60469          | -           | Transitions, pulses and related waveforms - Terms, definitions and algorithms  | EN 60469       | -           |
| IEC 60617          | -           | Standard data element types with associated classification scheme for electric components -- Part 4: IEC reference collection fo standard data element types and component classes | -              | -           |
| IEC 60679-1        | -           | Piezoelectric, dielectric and electrostatic oscillators of assessed quality - Part 1 : Generic specification   | EN 60679-1     | -           |
| IEC 62884-1        | -           | Measurement techniques of piezoelectric, dielectric and electrostatic oscillators - Part 1: Basic methods for the measurement  | EN 62884-1     | -           |
| ISO 80000-1        | -           | Quantities and units -- Part 1: General  | EN ISO 80000-1 | -           |

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**IEC 62884-4**

Edition 1.0 2019-05

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**



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**Measurement techniques of piezoelectric, dielectric and electrostatic oscillators –  
Part 4: Short-term frequency stability test methods**

**Techniques de mesure des oscillateurs piézoélectriques, diélectriques  
et électrostatiques –  
Partie 4: Méthodes d'essai de stabilité à court-terme de la fréquence**





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**IEC 62884-4**

Edition 1.0 2019-05

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**



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## **Measurement techniques of piezoelectric, dielectric and electrostatic oscillators – Part 4: Short-term frequency stability test methods**

## **Techniques de mesure des oscillateurs piézoélectriques, diélectriques et électrostatiques – Partie 4: Méthodes d'essai de stabilité à court-terme de la fréquence**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**MEASUREMENT TECHNIQUES OF PIEZOELECTRIC, DIELECTRIC AND  
ELECTROSTATIC OSCILLATORS –**
**Part 4: Short-term frequency stability test methods****FOREWORD**

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|             |                  |
|-------------|------------------|
| CDV         | Report on voting |
| 49/1277/CDV | 49/1292/RVC      |

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

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

A list of all parts in the IEC 62884 series, published under the general title *Measurement techniques of piezoelectric, dielectric and electrostatic oscillators*, can be found on the IEC website.

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

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## **MEASUREMENT TECHNIQUES OF PIEZOELECTRIC, DIELECTRIC AND ELECTROSTATIC OSCILLATORS –**

### **Part 4: Short-term frequency stability test methods**

#### **1 Scope**

This part of IEC 62884 describes the methods for the measurement and evaluation of the short-term frequency stability tests of piezoelectric, dielectric and electrostatic oscillators. Its purpose is to unify the test and evaluation methods for short-term frequency stability.

#### **2 Normative references**

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.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050-561, *International electrotechnical vocabulary – Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection*. Available at [www.electropedia.org](http://www.electropedia.org)

IEC 60469, *Transitions, pulses and related waveforms – Terms, definitions and algorithms*

IEC 60617, *Graphical symbols for diagrams*, available at <http://std.iec.ch/iec60617>

IEC 60679-1, *Piezoelectric, dielectric and electrostatic oscillators of assessed quality – Part 1: Generic specification*

IEC 62884-1, *Measurement techniques of piezoelectric, dielectric and electrostatic oscillators – Part 1: Basic methods for the measurement*

ISO 80000-1, *Quantities and units – Part 1: General*

#### **3 Terms and definitions, units and symbols**

##### **3.1 Terms and definitions**

For the purposes of this document, the terms and definitions given in IEC 60679-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses.

- IEC Electropedia: available at <http://www.electropedia.org>
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