



BSI Standards Publication

# **Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection — Glossary**

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Part 5: Piezoelectric sensors

## National foreword

This Published Document is the UK implementation of IEC TS 61994-5:2019.

The UK participation in its preparation was entrusted to Technical Committee EPL/49, Piezoelectric devices for frequency control and selection.

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

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## TECHNICAL SPECIFICATION

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Part 5: Piezoelectric sensors**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PIEZOELECTRIC, DIELECTRIC AND ELECTROSTATIC DEVICES  
AND ASSOCIATED MATERIALS FOR FREQUENCY CONTROL,  
SELECTION AND DETECTION –  
GLOSSARY –**

**Part 5: Piezoelectric sensors**

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Technical Specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC TS 61944-5, which is a Technical Specification, has been prepared by IEC technical committee 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

The text of this Technical Specification is based on the following documents:

| Draft TS    | Report on voting |
|-------------|------------------|
| 49/1295/DTS | 49/1296/RVDTS    |

Full information on the voting for the approval of this Technical Specification 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 61994 series, published under the general title *Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection – Glossary*, 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 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

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- withdrawn,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

A bilingual version of this publication may be issued at a later date.

# PIEZOELECTRIC, DIELECTRIC AND ELECTROSTATIC DEVICES AND ASSOCIATED MATERIALS FOR FREQUENCY CONTROL, SELECTION AND DETECTION – GLOSSARY –

## Part 5: Piezoelectric sensors

### 1 Scope

This part of IEC 61994 gives the terms and definition for sensors representing the state of the art, which are intended for manufacturing piezoelectric elements, cells and the modules.

### 2 Normative references

There are no normative references in this document.

### 3 Terms and definitions

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

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

#### 3.1

##### **delay line type sensor element**

piezoelectric sensor component using a delay-line of surface acoustic wave (SAW) transversal filter type

[SOURCE: IEC 63041-1:2017, 3.2.3, modified – The phrase has been rewritten in an easy-to-understand manner using a well-known term.]

#### 3.2

##### **non-acoustic type sensor element**

piezoelectric sensor component using the electrical charge induced by a quasi-static force, torque or the like

[SOURCE: IEC 63041-1:2017, 3.2.4, modified – Note 1 to entry has been deleted.]

#### 3.3

##### **piezoelectric biochemical sensor element**

piezoelectric sensor component including a receptive layer (target recognition material), which is necessary for the practical measurement of complex biological molecules in quantity, and which works mainly in aqueous media and detects biomolecules therein

[SOURCE: IEC 63041-1:2017, 3.3.2]