



# SLOVENSKI STANDARD

## SIST EN 62533:2016

01-april-2016

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### Oprema za varstvo pred sevanjem - Zelo občutljivi ročni instrumenti za zaznavanje ftonskega sevanja radioaktivnega materiala

Radiation protection instrumentation - Highly sensitive hand-held instruments for photon detection of radioactive material

Strahlenschutz-Messgeräte - Hochempfindliche Handgeräte zur Detektion von Photonenstrahlung emittierendem radioaktivem Material

Instrumentation pour la radioprotection - Instruments portables de haute sensibilité pour la détection photonique de matières radioactives

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**Ta slovenski standard je istoveten z: EN 62533:2016**

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#### **ICS:**

13.280	Varstvo pred sevanjem	Radiation protection
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<b>SIST EN 62533:2016</b>	<b>en</b>
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EUROPEAN STANDARD

**EN 62533**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2016

ICS 13.280

English Version

**Radiation protection instrumentation - Highly sensitive hand-held  
instruments for photon detection of radioactive material  
(IEC 62533:2010 , modified)**

Instrumentation pour la radioprotection - Instruments  
portables de haute sensibilité pour la détection photonique  
de matières radioactives  
(IEC 62533:2010 , modifiée)

Strahlenschutz-Messgeräte - Hochempfindliche Handgeräte  
zur Detektion von Photonenstrahlung emittierendem  
radioaktivem Material  
(IEC 62533:2010 , modifiziert)

This European Standard was approved by CENELEC on 2015-12-28. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

[SIST EN 62533:2016](#)

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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**

## European foreword

This document (EN 62533:2016) consists of the text of IEC 62533:2010 prepared by SC 45B "Radiation protection instrumentation" of IEC/TC 45 "Nuclear instrumentation", together with the common modifications prepared by CLC/TC 45B "Radiation protection instrumentation".

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) 2016-12-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-12-28

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## Endorsement notice

The text of the International Standard IEC 62533:2010 was approved by CENELEC as a European Standard with agreed common modifications.

### COMMON MODIFICATIONS

#### Modification to 8.6.3.2 Test method

*Add the following after the first paragraph:*

Instead of Cs-137, an alternate source (e.g. Ba-133 or NORM) may be used in case the required activity of Cs-137 cannot be transported to or handled at the site of RF measurement due to legal national restrictions.

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## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-393	2003	International Electrotechnical Vocabulary - Part 393: Nuclear instrumentation - Physical phenomena and basic concepts	-	-
IEC 60050-394	2007	International Electrotechnical Vocabulary - Part 394: Nuclear instrumentation - Instruments, systems, equipment and detectors	-	-
IEC 60068-2-75	1997	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-	-	+ corrigendum May	1993
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
IEC 61000-4-6	2008	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2009
ISO 4037-1	1996	X and gamma reference radiation for calibrating dosimeters and doserate meters and for determining their response as a function of photon energy - Part 1: Radiation characteristics and production methods	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 4037-2	1997	X and gamma reference radiation for calibrating dosimeters and doserate meters and for determining their response as a function of photon energy - Part 2: Dosimetry for radiation protection over the energy ranges from 8 keV to 1,3 MeV and 4 MeV to 9 MeV	-	-
ISO 4037-3	1999	X and gamma reference radiation for calibrating dosimeters and doserate meters and for determining their response as a function of photon energy - Part 3: Calibration of area and personal dosimeters and the measurement of their response as a function of energy and angle of incidence	-	-

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IEC 62533

Edition 1.0 2010-06

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Radiation protection instrumentation – Highly sensitive hand-held instruments  
for photon detection of radioactive material**

**Instrumentation pour la radioprotection – Instruments portables de haute  
sensibilité pour la détection photonique de matières radioactives**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
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ICS 13.280

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIATION PROTECTION INSTRUMENTATION –  
HIGHLY SENSITIVE HAND-HELD INSTRUMENTS  
FOR PHOTON DETECTION OF RADIOACTIVE MATERIAL**

## FOREWORD

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International Standard IEC 62533 has been prepared by subcommittee 45B: Radiation protection instrumentation, of IEC technical committee 45: Nuclear instrumentation.

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

FDIS	Report on voting
45B/640/FDIS	45B/654/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.