SLOVENSKI STANDARD
SIST EN IEC 61757-1:2018

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Nadomešča:
SIST EN 61757-1:2012

Optična zaznavala - 1. del: Splošna specifikacija (IEC 61757:2018)

Fibre optic sensors - Part 1: Generic specification (IEC 61757:2018)

LWL-Sensoren - Teil 1: Fachgrundspezifikation (IEC 61757:2018)

Capteurs a fibres optiques - Partie 1: Spécification générique (IEC 61757:2018)

Ta slovenski standard je istoveten z: **EN IEC 61757:2018**

ICS:

33.180.99	Druga oprema za optična vlakna	Other fibre optic equipment

SIST EN IEC 61757-1:2018 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61757

October 2018

ICS 33.180.99

Supersedes EN 61757-1:2012

English Version

Fibre optic sensors - Generic specification (IEC 61757:2018)

Capteurs à fibres optiques - Spécification générique (IEC 61757:2018)

LWL-Sensoren - Fachgrundspezifikation (IEC 61757:2018)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 86C/1461/CDV, future edition 1 of IEC 61757, prepared by SC 86C "Fibre optic systems and active devices" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61757:2018.

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) 2019-04-19
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-10-19

This document supersedes EN 61757-1:2012.

This document constitutes a technical revision including the following technical changes with respect to EN 61757-1:2012:

a. change of the document number due to a new structure of the fibre optic sensor standard series;

b. update of the normative references and bibliography;

c. revision of Annex A.

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The text of the International Standard IEC 61757:2018 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60654-4	NOTE	Harmonized as EN 60654-4.
IEC 60721-1	NOTE	Harmonized as EN 60721-1.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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.

Publication	Year	Title	EN/HD	Year
IEC 60050	series	International Electrotechnical Vocabulary	-	series
IEC 60060-1	-	High-voltage test techniques -- Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60068-1	-	Environmental testing -- Part 1: General and guidance	EN 60068-1	-
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	-
IEC 60068-2-2	-	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	-
IEC 60068-2-5	-	Environmental testing – Part 2-5: Tests – Test Sa: Simulated solar radiation at ground level and guidance for solar radiation testing	EN IEC 60068-2-5	-
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-10	-	Environmental testing - Part 2-10: Tests - Test J and guidance: Mould growth	EN 60068-2-10	-
IEC 60068-2-11	-	Basic environmental testing procedures - Part 2-11: Tests - Test Ka: Salt mist	EN 60068-2-11	-
IEC 60068-2-13	-	Basic environmental testing procedures - Part 2-13: Tests - Test M: Low air pressure	EN 60068-2-13	-
IEC 60068-2-14	-	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	-
IEC 60068-2-27	-	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	-
IEC 60068-2-30	-	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	-

Publication	Year	Title	EN/HD	Year
IEC 60068-2-42	-	Environmental testing - Part 2-42: Tests - Test Kc: Sulphur dioxide test for contacts and connections	EN 60068-2-42	-
IEC 60068-2-43	-	Environmental testing - Part 2-43: Tests - Test Kd: Hydrogen sulphide test for contacts and connections	EN 60068-2-43	-
IEC 60068-2-78	-	Environmental testing -- Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60079-28	-	Explosive atmospheres -- Part 28: Protection of equipment and transmission systems using optical radiation	EN 60079-28	-
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	-	-
IEC 60793-1-20	-	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	-
IEC 60793-1-21	-	Optical fibres -- Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	-
IEC 60793-1-31	-	Optical fibres -- Part 1-31: Measurement methods and test procedures - Tensile strength	EN 60793-1-31	-
IEC 60793-1-32	-	Optical fibres -- Part 1-32: Measurement methods and test procedures - Coating strippability	EN 60793-1-32	-
IEC 60793-1-47	-	Optical fibres – Part 1-47: Measurement methods and test procedures – Macrobending loss	EN IEC 60793-1-47	-
IEC 60793-1-54	-	Optical fibres – Part 1-54: Measurement methods and test procedures – Gamma irradiation	EN IEC 60793-1-54	-
IEC 60794-1-21	-	Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods	EN 60794-1-21	-
IEC 60825-1	-	Safety of laser products -- Part 1: Equipment classification and requirements	EN 60825-1	-
IEC 60874-1	-	Fibre optic interconnecting devices and passive components - Connectors for optical fibres and cables -- Part 1: Generic specification	EN 60874-1	-
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	-	-

Publication	Year	Title	EN/HD	Year
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) -- Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	-
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 61300	series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300	series
IEC 61300-2-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal)	EN 61300-2-1	-
IEC 61300-2-9	-	Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-9: Tests – Shock	EN 61300-2-9	-
IEC 61300-2-18	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-18: Tests - Dry heat - High temperature endurance	EN 61300-2-18	-
IEC 61300-2-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature	EN 61300-2-22	-
IEC 61300-2-34	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-34: Tests - Resistance to solvents and contaminating fluids of interconnecting components and closures	EN 61300-2-34	-
IEC 61300-2-46	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-46: Tests - Damp heat cyclic	EN 61300-2-46	-
IEC 61300-3-35	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-35: Examinations and measurements - Visual inspection of fibre optic connectors and fibre-stub transceivers	EN 61300-3-35	-
IEC 61753	series	Fibre optic interconnecting devices and passive components performance standard	EN 61753	series
IEC/TR 61931	-	Fibre optic - Terminology	-	-
IEC/TR 62222	-	Fire performance of communication cables installed in buildings	-	-
IEC/TR 62283	-	Optical fibres - Guidance for nuclear radiation tests	-	-

Publication	Year	Title	EN/HD	Year
IEC/TR 62627-01	-	Fibre optic interconnecting devices and passive components - Part 01: Fibre optic connector cleaning methods	-	-
ISO/IEC Guide 99	-	International vocabulary of metrology - Basic and general concepts and associated terms (VIM)	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic sensors – Generic specification

Capteurs à fibres optiques – Spécification générique

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FIBRE OPTIC SENSORS – GENERIC SPECIFICATION

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 61757 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

This first edition of IEC 61757 cancels and replaces IEC 61757-1, published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 61757-1:2012:

a) change of the document number due to a new structure of the fibre optic standard series;
b) update of the normative references and bibliography;
c) revision of Annex A.