



SLOVENSKI STANDARD
SIST EN IEC 61757-1-2:2024

01-februar-2024

Optični senzorji - 1-2. del: Merjenje deformacij - Porazdeljeno zaznavanje na podlagi Brillouinovega sipanja (IEC 61757-1-2:2023)

Fibre optic sensors - Part 1-2: Strain measurement - Distributed sensing based on Brillouin scattering (IEC 61757-1-2:2023)

Lichtwellenleiter-Sensoren - Teil 1-2: Dehnungsmessung - Verteilte Sensorik auf der Basis von Brillouin-Streuung (IEC 61757-1-2:2023)

Capteurs fibroniques - Partie 1-2: Mesure de déformation - Détection répartie basée sur la diffusion de Brillouin (IEC 61757-1-2:2023)

Ta slovenski standard je istoveten z: EN IEC 61757-1-2:2023

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ICS:

33.180.99	Druga oprema za optična vlakna	Other fibre optic equipment
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61757-1-2

September 2023

ICS 33.180.99

English Version

**Fibre optic sensors - Part 1-2: Strain measurement - Distributed sensing based on Brillouin scattering
(IEC 61757-1-2:2023)**

Capteurs fibroniques - Partie 1-2: Mesure de déformation -
Détection répartie basée sur la diffusion de Brillouin
(IEC 61757-1-2:2023)

Lichtwellenleiter-Sensoren - Teil 1-2: Dehnungsmessung -
Verteilte Sensorik auf der Basis von Brillouin-Streuung
(IEC 61757-1-2:2023)

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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

EN IEC 61757-1-2:2023 (E)

European foreword

The text of document 86C/1857/CDV, future edition 1 of IEC 61757-1-2, 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 61757-1-2:2023.

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) 2024-06-20
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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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61757	2018	Fibre optic sensors - Generic specification	EN IEC 61757	2018
IEC 61757-2-2	2016	Fibre optic sensors - Part 2-2: Temperature measurement - Distributed sensing	EN 61757-2-2	2017
IEC 61757-3-2	2022	Fibre optic sensors - Part 3-2: Acoustic sensing and vibration measurement - Distributed sensing	EN IEC 61757-3-2	2022
ISO/IEC Guide 98-3 -		Uncertainty of measurement - Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



Fibre optic sensors –

Part 1-2: Strain measurement – Distributed sensing based on Brillouin scattering

Capteurs fibroniques –

Partie 1-2: Mesure de déformation – Détection répartie basée sur la diffusion de Brillouin

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC SENSORS –

Part 1-2: Strain measurement –
Distributed sensing based on Brillouin scattering

FOREWORD

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IEC 61757-1-2 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86C/1857/CDV	86C/1872/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 61757 series, published under the general title *Fibre optic sensors*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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- withdrawn, or
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INTRODUCTION

This document is part of the IEC 61757 series, which is dedicated to fibre optic sensors. Generic specifications for fibre optic sensors are defined in IEC 61757.

The individual parts of the IEC 61757 series are numbered as IEC 61757-*M-T*, where *M* denotes the measure and *T* the technology of the fibre optic sensor. The IEC 61757-1-*T* series is concerned with strain measurements.

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