BS EN IEC 61757-6-1:2024

BSI Standards Publication

Fibre optic sensors

Part 6-1: Displacement measurement — Displacement sensors based on fibre Bragg gratings

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee GEL/86/3, Fibre optic systems and active devices.

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

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61757-6-1

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English Version

Fibre optic sensors - Part 6-1: Displacement measurement - Displacement sensors based on fibre Bragg gratings (IEC 61757-6-1:2024)

Capteurs fibroniques - Partie 6-1: Mesure de déplacement - Capteurs de déplacement basés sur des réseaux de Bragg sur fibre (IEC 61757-6-1:2024)

Lichtwellenleitersensoren - Teil 6-1: Wegmessung - Wegsensoren auf der Basis von Faser Bragg-Gittern (IEC 61757-6-1:2024)

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European foreword

The text of document 86C/1874/CDV, future edition 1 of IEC 61757-6-1, 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 61757-6-1:2024.

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) 2024-11-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-02-23

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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.

Publication	Year	Title	EN/HD	Year
IEC 60068-2	series	Environmental testing - Part 2-X: Tests	EN IEC 60068-2	series[1]
IEC 61300-2	series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-X: Tests	EN IEC 61300-2	series
IEC 61754	series	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces	EN IEC 61754	series
IEC 61757	-	Fibre optic sensors - Generic specification	EN IEC 61757	-
IEC 61757-1-1	2020	Fibre optic sensors - Part 1-1: Strain measurement - Strain sensors based on fibre Bragg gratings	EN IEC 61757-1-1	2020
IEC 62129-1	-	Calibration of wavelength/optical frequency measurement instruments - Part 1: Optical spectrum analyzers	EN 62129-1	-
IEC 62129-2	-	Calibration of wavelength/optical frequency measurement instruments - Part 2: Michelson interferometer single wavelength meters	EN 62129-2	-
IEC 62129-3	-	Calibration of wavelength/optical frequency measurement instruments - Part 3: Optical frequency meters internally referenced to a frequency comb	EN IEC 62129-3	-
ISO/IEC Guide 98-3	-	Uncertainty of measurement - Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)	-	-

[1] The ENs referred to in this series are limited to those corresponding to the IEC standards still in force. Moreover, some IEC standards in this series do not currently have a corresponding EN; for these standards the IEC standard only is here intended to be referred to.

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FIBRE OPTIC SENSORS –

Part 6-1: Displacement measurement – Displacement sensors based on fibre Bragg gratings

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IEC 61757-6-1 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/1874/CDV	86C/1891/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.

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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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