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**Optična vlakna – 1-1. del: Metode merjenja in preskusni postopki - Splošno in smernice (IEC 60793-1-1:2002)\***

Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance (IEC 60793-1-1:2002)

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EUROPEAN STANDARD

**EN 60793-1-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2003

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English version

**Optical fibres**  
**Part 1-1: Measurement methods and test procedures -**  
**General and guidance**  
(IEC 60793-1-1:2002)

Fibres optiques  
Partie 1-1: Méthodes de mesure  
et procédures d'essai -  
Généralités et guide  
(CEI 60793-1-1:2002)

Lichtwellenleiter  
Teil 1-1: Mess- und Prüfverfahren -  
Allgemeines und Leitfaden  
(IEC 60793-1-1:2002)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 86A/815/FDIS, future edition 2 of IEC 60793-1-1, prepared by SC 86A, Fibres and cables, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60793-1-1 on 2002-12-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2003-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2005-12-01

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative. Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60793-1-1:2002 was approved by CENELEC as a European Standard without any modification.

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**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-1-20	- <sup>1)</sup>	Optical fibres Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	2002 <sup>2)</sup>
IEC 60793-1-21	- <sup>1)</sup>	Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	2002 <sup>2)</sup>
IEC 60793-1-22	- <sup>1)</sup>	Part 1-22: Measurement methods and test procedures - Length measurement	EN 60793-1-22	2002 <sup>2)</sup>
IEC 60793-1-30	- <sup>1)</sup>	Part 1-30: Measurement methods and test procedures - Fibre proof test	EN 60793-1-30	2002 <sup>2)</sup>
IEC 60793-1-31	- <sup>1)</sup>	Part 1-31: Measurement methods and test procedures - Tensile strength	EN 60793-1-31	2002 <sup>2)</sup>
IEC 60793-1-32	- <sup>1)</sup>	Part 1-32: Measurement methods and test procedures - Coating strippability	EN 60793-1-32	- <sup>3)</sup>
IEC 60793-1-33	- <sup>1)</sup>	Part 1-33: Measurement methods and test procedures - Stress corrosion susceptibility	EN 60793-1-33	2002 <sup>2)</sup>
IEC 60793-1-34	- <sup>1)</sup>	Part 1-34: Measurement methods and test procedures - Fibre curl	EN 60793-1-34	2002 <sup>2)</sup>
IEC 60793-1-40	- <sup>1)</sup>	Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	- <sup>3)</sup>
IEC 60793-1-41	- <sup>1)</sup>	Part 1-41: Measurement methods and test procedures - Bandwidth	EN 60793-1-41	2002 <sup>2)</sup>
IEC 60793-1-42	- <sup>1)</sup>	Part 1-42: Measurement methods and test procedures - Chromatic dispersion	EN 60793-1-42	2002 <sup>2)</sup>

1) Undated reference.

2) Valid edition at date of issue.

3) To be published.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-1-43	- <sup>1)</sup>	Part 1-43: Measurement methods and test procedures - Numerical aperture	EN 60793-1-43	2002 <sup>2)</sup>
IEC 60793-1-44	- <sup>1)</sup>	Part 1-44: Measurement methods and test procedures - Cut-off wavelength	EN 60793-1-44	2002 <sup>2)</sup>
IEC 60793-1-45	- <sup>1)</sup>	Part 1-45: Measurement methods and test procedures - Mode field diameter	EN 60793-1-45	- <sup>3)</sup>
IEC 60793-1-46	- <sup>1)</sup>	Part 1-46: Measurement methods and test procedures - Monitoring of changes in optical transmittance	EN 60973-1-46	2002 <sup>2)</sup>
IEC 60793-1-47	- <sup>1)</sup>	Part 1-47: Measurement methods and test procedures - Macrobending loss	EN 60793-1-47	2002 <sup>2)</sup>
IEC 60793-1-48	- <sup>4)</sup>	Part 1-48: Measurement methods and test procedures - Polarisation mode dispersion	-	-
IEC 60793-1-50	- <sup>1)</sup>	Part 1-50: Measurement methods and test procedures - Damp heat (steady state)	EN 60793-1-50	2002 <sup>2)</sup>
IEC 60793-1-51	- <sup>1)</sup>	Part 1-51: Measurement methods and test procedures - Dry heat	EN 60793-1-51	2002 <sup>2)</sup>
IEC 60793-1-52	- <sup>1)</sup>	Part 1-52: Measurement methods and test procedures - Change of temperature	EN 60793-1-52	2002 <sup>2)</sup>
IEC 60793-1-53	- <sup>1)</sup>	Part 1-53: Measurement methods and test procedures - Water immersion	EN 60793-1-53	2002 <sup>2)</sup>
IEC 60793-1-54	- <sup>4)</sup>	Part 1-54: Measurement methods and test procedures - Gamma irradiation	-	-
IEC 60793-2	Series	Optical fibres Part 2: Product specifications	EN 60793-2	Series
IEC/TR3 61931	- <sup>1)</sup>	Fibre optic - Terminology	-	-
IEC/TS 61941	- <sup>1)</sup>	Optical fibres - Polarization mode dispersion measurement techniques for single-mode optical fibres	-	-

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<sup>4)</sup> In preparation.

NORME  
INTERNATIONALE  
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**Fibres optiques –**

**Partie 1-1:**

**Méthodes de mesure et procédures d'essai –  
Généralités et guide**

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**Optical fibres –**

**Part 1-1: [SIST EN 60793-1-1:2004](https://standards.iteh.ai/catalog/standards/sist/3a0ae967-63d6-4bca-a38b-117210c7acea/sist-en-60793-1-1-2004)**

**Measurement methods and test procedures –  
General and guidance**

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Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## OPTICAL FIBRES –

**Part 1-1: Measurement methods and test procedures –  
General and guidance**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 60793-1-1 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This second edition, cancels and replaces the first edition published in 1995 and its amendment 1 (1998).

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

FDIS	Report on voting
86A/815/FDIS	86A/827/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.