BS EN IEC 60794-2-20:2025

BSI Standards Publication

Optical fibre cables

Part 2-20: Indoor cables — Family specification for multi-fibre optical cables

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National foreword

This British Standard is the UK implementation of EN IEC 60794-2-20:2025. It is identical to IEC 60794-2-20:2024. It supersedes BS EN 60794-2-20:2014, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/86/1, Optical fibres and cables.

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

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ISBN 978 0 539 22081 0

ICS 33.180.01

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 28 February 2025.

Amendments/corrigenda issued since publication

Date	Text affected

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60794-2-20

January 2025

ICS 33.180.01

Supersedes EN 60794-2-20:2014

English Version

Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables (IEC 60794-2-20:2024)

Câbles à fibres optiques - Partie 2-20 : Câbles intérieurs - Spécification de famille pour les câbles optiques multifibres (IEC 60794-2-20:2024)

Lichtwellenleiterkabel - Teil 2-20: LWL-Innenkabel - Familienspezifikation für Mehrfaser-Lichtwellenleiterkabel (IEC 60794-2-20:2024)

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Comité Européen de Normalisation Electrotechnique
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European foreword

The text of document 86A/2431/FDIS, future edition 4 of IEC 60794-2-20, prepared by SC 86A "Fibres and cables" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60794-2-20:2025.

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) 2026-01-31
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2028-01-31

This document supersedes EN 60794-2-20:2014 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document is read in conjunction with EN IEC 60794-1-1:2023, .EN IEC 60794-1-2:2021, EN 60794-1-21:2015[1], EN IEC 60794-1-22:2018, EN IEC 60794-1-23:2019, and EN 60794-2:2017.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60794-2-20:2024 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 standard indicated:

IEC 60654 series	NOTE	Approved as EN 60654 series
IEC 60721-1	NOTE	Approved as EN 60721-1
IEC 60721-3-3	NOTE	Approved as EN IEC 60721-3-3
IEC 60794-1-3	NOTE	Approved as EN 60794-1-3
IEC 60794-1-21	NOTE	Approved as EN 60794-1-21
IEC 61000-6-2	NOTE	Approved as EN IEC 61000-6-2
IEC 61753-1	NOTE	Approved as EN IEC 61753-1
IEC 61918	NOTE	Approved as EN IEC 61918
IEC 60794-2 series	NOTE	Approved as EN IEC 60794-2 series

[1] As impacted by EN 60794-1-21:2015/A1:2020.

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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 60304	-	Standard colours for insulation for low-frequency cables and wires	HD 402 S2	-
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 60793-1-40	-	Optical fibres - Part 1-40: Attenuation measurement methods	EN IEC 60793-1-40	-
IEC 60793-1-44	-	Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength	EN IEC 60793-1-44	-
IEC 60793-1-46	-	Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in attenuation	EN IEC 60793-1-46	-
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN IEC 60793-2-10	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN IEC 60793-2-50	-
IEC 60794-1-1	2023	Optical fibre cables - Part 1-1: Generic specification - General	EN IEC 60794-1-1	2023
IEC 60794-1-2	2021	Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures - General guidance	EN IEC 60794-1-2	2021
IEC 60794-1-21	2015	Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods	EN 60794-1-21	2015
+ A1	2020		+ A1	2020

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Publication	Year	Title	EN/HD	Year
IEC 60794-1-22	2017	Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods	EN IEC 60794-1-22	2018
IEC 60794-1-23	2019	Optical fibre cables - Part 1-23: Generic specification - Basic optical cable test procedures - Cable element test methods	EN IEC 60794-1-23	2019
IEC 60794-1-31	-	Optical fibre cables - Part 1-31: Generic specification - Optical cable elements - Optical fibre ribbon	EN IEC 60794-1-31	-
IEC 60794-2	2017	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	2017
IEC 60811-202	-	Electric and optical fibre cables - Test methods for non-metallic materials - Part 202: General tests - Measurement of thickness of non-metallic sheath	EN 60811-202	-
IEC 60811-203	-	Electric and optical fibre cables - Test methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions	EN 60811-203	-

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OPTICAL FIBRE CABLES –

Part 2-20: Indoor cables – Family specification for multi-fibre optical cables

FOREWORD

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IEC 60794-2-20 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) update of the normative references;
b) review update of parameters and requirements for mechanical tests and environmental tests, maintaining alignment with additional relevant standards in the IEC 60794-2 series;
c) addition of cabled fibre attenuation requirements;

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d) addition of cable design examples.

This document is to be used in conjunction with IEC 60794-1-1:2023, IEC 60794-1-2:2021, IEC 60794-1-21:2015 and IEC 60794-1-21:2015/AMD:2020, IEC 60794-1-22:2017, IEC 60794-1-23:2019 and IEC 60794-2:2017.

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

Draft	Report on voting
86A/2431/FDIS	86A/2520/RVD

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 of IEC 60794 series, published under the general title *Optical fibre cables*, 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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