

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibre cables –
Part 6-10: Indoor-outdoor cables – Family specification for universal
indoor-outdoor cables**

**Câbles à fibres optiques –
Partie 6-10: Câbles intérieurs/extérieurs – Spécification de famille pour
les câbles intérieurs/extérieurs universels**





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

FDIS	Report on voting
86A/2036/FDIS	86A/2050/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60794 series, published under the general title *Optical fibre cables*, can be found on the IEC website.

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OPTICAL FIBRE CABLES –

Part 6-10: Indoor-outdoor cables – Family specification for universal indoor-outdoor cables

1 Scope

This part of IEC 60794 is a family specification covering features of optical fibre cables applicable to outdoor as well as indoor environments, called "universal indoor-outdoor cables". These cables generally possess the characteristics associated with outdoor cable designs (according to IEC 60794-3, however typically less stringent, and typically "non armoured") having the thermal and mechanical robustness that makes them suitable for use in the outside plant, while simultaneously being flexible enough, compact and lightweight and exhibiting the fire performance required in indoor premises. A typical application is for example the centralized cabling in central office and the premises or local area network where the same cable design is used for the entire length of the cabling link including both the indoor as well as the outdoor portions.

2 Normative references

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.

IEC 60332-1 (all parts), *Tests on electric and optical fibre cables under fire conditions – Part 1: Test for vertical flame propagation for a single insulated wire or cable*

IEC 60332-3 (all parts), *Tests on electric and optical fibre cables under fire conditions – Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables*

IEC 60754-2:2011, *Test on gases evolved during combustion of materials from cables – Part 2: Determination of acidity (by pH measurement) and conductivity*

IEC 60793-2, *Optical fibres – Part 2: Product specifications – General*

IEC 60793-2-10, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General*

IEC 60794-1-21, *Optical fibre cables – Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical test methods*

IEC 60794-1-22:2017, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental test methods*

IEC 60794-1-23, *Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable element test methods*

IEC 60794-1-24, *Optical fibre cables – Part 1-24: Generic specification – Basic optical cable test procedures – Electrical test methods*

IEC 60794-1-31:2018, *Optical fibre cables – Part 1-31 : Generic specification – Optical cable elements – Optical fibre ribbon*

IEC 60794-1-215, *Optical fibre cables – Part 1-215: Generic specification – Basic optical cable test procedures – Environmental test methods – Cable external freezing test, Method F15*

IEC 60794-2 (all parts), *Optical fibre cables – Part 2: Indoor cables*

IEC 60794-2, *Optical fibre cables – Part 2: Indoor cables – Sectional specification*

IEC 60794-3 (all parts), *Optical fibre cables – Part 3: Outdoor cables*

IEC 60794-3-10:2015, *Optical fibre cables – Part 3-10: Outdoor cables – Family specification for duct, directly buried and lashed aerial optical telecommunication cables*

IEC 60794-6:2020, *Optical fibre cables – Part 6: Indoor-outdoor cables – Sectional specification for indoor-outdoor cables*

IEC 60811-202:2012, *Electric and optical cables – Test methods for non-metallic materials – Part 202: General tests – Measurement of thickness of non-metallic sheath*
IEC 60811-202:2012/AMD1:2017

IEC 60811-203:2012, *Electric and optical cables – Test methods for non-metallic materials – Part 203: General tests – Measurement of overall dimensions*

IEC 60811-406, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 406: Miscellaneous tests – Resistance to stress cracking of polyethylene and polypropylene compounds*

IEC 60811-604, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 604: Physical tests – Measurement of absence of corrosive components in filling compounds*

IEC 61034 (all parts), *Measurement of smoke density of cables burning under defined conditions*

ISO 4892-2:2013, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps*

3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms, definitions and abbreviated terms given in IEC 60794-1-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Terms and definitions

No terms and definitions are listed in this document.