

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Optical fibre cables –  
Part 3-21: Outdoor cables – Product specification for optical self-supporting  
aerial telecommunication cables for use in premises cabling**

**Câbles à fibres optiques –  
Partie 3-21: Câbles extérieurs – Spécification de produit pour les câbles  
optiques de télécommunication aériens autoporteurs utilisés dans le câblage de  
locaux**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## OPTICAL FIBRE CABLES –

**Part 3-21: Outdoor cables –  
Product specification for optical self-supporting aerial  
telecommunication cables for use in premises cabling**

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International Standard IEC 60794-3-21 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This bilingual version (2017-11) corresponds to the monolingual English version, published in 2015-11.

This second edition cancels and replaces the first edition published in 2005. This edition constitutes a technical revision.

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

- a) reference to ISO 24702;
- b) reference to Fibre B6 (IEC 60793-2-50);
- c) reference to the OS2 Fibre as defined by ISO/IEC 11801.

This standard shall be used in conjunction with IEC 60794-1-1, IEC 60794-1-2, IEC 60794-3 and IEC 60794-3-20.

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

CDV	Report on voting
86A/1564/CDV	86A/1624/RVC

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

The French version of this standard has not been voted upon.

This publication 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.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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## OPTICAL FIBRE CABLES –

### Part 3-21: Outdoor cables – Product specification for optical self-supporting aerial telecommunication cables for use in premises cabling

#### 1 Scope

This part of IEC 60794 is a product specification. It presents the detailed requirements specific to optical self-supporting aerial telecommunication cables for use in premises cabling to ensure compatibility with ISO/IEC 11801 and ISO/IEC 24702. The requirements of the family specification IEC 60794-3-20 and sectional specification IEC 60794-3 are applicable to cables covered by this standard.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60793-2-10:2011, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 60793-2-50:2012, *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 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Cross reference table for optical cable test procedures*

IEC 60794-3, *Optical fibre cables – Part 3: Outdoor cables – Sectional specification*

IEC 60794-3-20, *Optical fibre cables – Part 3-20: Outdoor cables – Family specification for self-supporting aerial telecommunication cables*

ISO/IEC 11801, *Information technology – Generic cabling for customers premises*

ISO/IEC 24702, *Information technology – Generic cabling – Industrial premises*

#### 3 General requirements

The cable shall comply with the family specification, IEC 60794-3-20, and meet the requirements which are defined in it, including requirements in the sectional specification, IEC 60794-3.

The optical fibre contained in cables covered by this standard shall comply with one of the following standards, and meet the normative requirements defined within them as applicable:

- IEC 60793-2-50:2012, Annex A (Single-mode fibre category B1.1);
- IEC 60793-2-50: 2012, Annex C (Single-mode fibre category B1.3);
- IEC 60793-2-10:2011, Annex A (Multimode fibre, sub-category A1a, 50 µm core diameter);
- IEC 60793-2-10:2011, Annex B (Multimode fibre, sub-category A1b, 62,5 µm core diameter).