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Standards

Irish Standard  
I.S. EN 60794-3-21:2016

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

**I.S. EN 60794-3-21:2016**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

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## National Foreword

I.S. EN 60794-3-21:2016 is the adopted Irish version of the European Document EN 60794-3-21:2016, 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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*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60794-3-21**

February 2016

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Supersedes EN 60794-3-21:2006

English Version

**Optical fibre cables - Part 3-21: Outdoor cables - Product  
specification for optical self-supporting aerial telecommunication  
cables for use in premises cabling  
(IEC 60794-3-21:2015)**

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  
(IEC 60794-3-21:2015)

Lichtwellenleiterkabel - Teil 3-21: LWL-Außenkabel -  
Produktspezifikation für selbsttragende Fernmelde-  
Luftkabel für anwendungsneutrale Standortverkabelung  
(IEC 60794-3-21:2015)

This European Standard was approved by CENELEC on 2015-12-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## **EN 60794-3-21:2016**

### **European foreword**

The text of document 86A/1564/CDV, future edition 2 of IEC 60794-3-21, 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 60794-3-21:2016.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-09-24  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2018-12-24  
standards conflicting with the  
document have to be withdrawn

This document supersedes EN 60794-3-21:2006.

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

### **Endorsement notice**

The text of the International Standard IEC 60794-3-21:2015 was approved by CENELEC as a European Standard without any modification.

## Annex ZA (normative)

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

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.

NOTE 1 When 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.cenelec.eu](http://www.cenelec.eu)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-2-10	2011	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	2011
IEC 60793-2-50	2012	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single- mode fibres	EN 60793-2-50	2013
IEC 60794-1-1	-	Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	-
IEC 60794-1-2	-	Optical fibre cables - Part 1-2: Generic specification - Cross reference table for optical cable test procedures	EN 60794-1-2	-
IEC 60794-3	-	Optical fibre cables - Part 3: Outdoor cables - Sectional specification	EN 60794-3	-
IEC 60794-3-20	-	Optical fibre cables - Part 3-20: Outdoor cables - Family specification for self-supporting aerial telecommunication cables	EN 60794-3-20	-
ISO/IEC 11801	-	Information technology - Generic cabling - for customer premises	-	-
ISO/IEC 24702	-	Information technology - Generic cabling - Industrial premises	-	-

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**IEC 60794-3-21**

Edition 2.0 2015-11

# **INTERNATIONAL STANDARD**



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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**



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**IEC 60794-3-21**

Edition 2.0 2015-11

# INTERNATIONAL STANDARD



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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**

INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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**

### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 60794-3-21 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 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.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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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);

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