



# INTERNATIONAL STANDARD

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**Optical fibre cables –  
Part 3-30: Outdoor cables – Family specification for optical telecommunication  
cables for lakes, river crossings and coastal applications**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### OPTICAL FIBRE CABLES –

#### **Part 3-30: Outdoor cables – Family specification for optical telecommunication cables for lakes, river crossings and coastal application**

### FOREWORD

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International Standard IEC 60794-3-30 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

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

This second edition cancels and replaces the first edition published in 2002. This edition constitutes a technical revision. The main changes with respect to the previous edition are listed below:

- the title of the specification has been updated to include coastal applications;
- fibres specification have been enlarged to include fibre Type B5;
- an annex has been added for additional requirements according to the MICE table.

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

FDIS	Report on voting
86A/1203/FDIS	86A/1222/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.

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

A list of all parts of IEC 60794 series, 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 maintenance result 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- withdrawn;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.

## **OPTICAL FIBRE CABLES –**

### **Part 3-30: Outdoor cables – Family specification for optical telecommunication cables for lakes, river crossings and coastal application**

#### **1 Scope**

This family specification covers optical telecommunication cables to be used as underwater cables for lakes, river crossings and coastal applications. Requirements of the sectional specification IEC 60794-3 for duct, buried, aerial and lake, river crossings and coastal applications cables are applicable to cables covered by this standard. This standard does not cover methods of cable repair nor repair capability, nor does it cover cables for use with lake, river crossings and coastal applications line amplifiers.

Clause 4 of this standard describes a blank detail specification for optical telecommunication cables to be used for lakes, river crossings and coastal applications. It incorporates some minimum requirements.

Annex A describes a blank detail specification which may be used to prepare detail specifications.

Annex B describes the cable construction

Annex C describes a blank detail specification for ISO/IEC 24702 applications (MICE).

The parameters specified in this standard may be affected by measurement uncertainty arising either from measurement errors or calibration errors due to lack of suitable standards. Acceptance criteria are interpreted with respect to this consideration (see IEC 60794-3, Clause 9).

The number of fibres tested should be representative of the cable design and should be agreed between the customer and the supplier.

#### **2 Normative references**

The following referenced documents are indispensable for the application 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.

They complete the normative references already listed in the generic specification (IEC 60794-1-1, Clause 2 and IEC 60794-1-2, Clause 2) and in the sectional specification (IEC 60794-3, Clause 2).

IEC 60793-1-48, *Optical fibres – Part 1-48: Measurement methods and test procedures – Polarization mode dispersion*

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