



EDC6 (4044) DTZS
IEC 60794-1-1:2023

DRAFT TANZANIA STANDARD

(Draft for comments only)

Optical fibre cables - Part 1-1: Generic specification – General

TANZANIA BUREAU OF STANDARDS

Draft for stakeholders' comments only

1 National Foreword

This draft Tanzania Standard is being prepared by the Telecommunications and Information Technology Technical Committee, under the supervision of the Electrotechnical divisional standards committee (EDC)

This draft Tanzania Standard is an adoption of the International Standard **IEC 60794-1-1:2023** Optical fibre cables - Part 1-1: Generic specification – General, Which has been prepared by the International Electrotechnical Commission

2 Terminology and conventions

Some terminologies and certain conventions are not identical with those used in Tanzania standards; attention is drawn especially to the following: -

- 1) The comma has been used as a decimal marker for metric dimensions. In Tanzania Standards, it is current practice to use “full point” on the baseline as the decimal marker.
- 2) Where the words “International Standard(s)” appear, referring to this standard they should read “Tanzania Standard(s)”.

CONTENTS

FOREWORD	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	7
4 Graphical symbols and abbreviated terms.....	12
5 Optical fibre cables – IEC 60794 structure.....	13
5.1 General	13
5.2 IEC 60794-1 series.....	13
5.3 IEC 60794-2 series.....	14
5.4 IEC 60794-3 series.....	14
5.5 IEC 60794-4 series.....	15
5.6 IEC 60794-5 series.....	15
5.7 IEC 60794-6 series.....	15
5.8 IEC 60794-7 series.....	16
6 Cable materials	16
6.1 Indoor cable materials.....	16
6.2 Outdoor cable materials.....	16
6.3 Indoor/outdoor cable materials.....	17
6.4 Environmental requirements for cable materials	17
7 Cable construction	17
7.1 General	17
7.2 Colour coding.....	17
7.2.1 Overview.....	17
7.2.2 Fibre colour coding	18
7.2.3 Unit colour coding	18
7.2.4 Sheath colour coding.....	18
7.3 Fibre.....	18
7.3.1 General.....	18
7.3.2 Attenuation coefficient.....	18
7.3.3 Attenuation uniformity – Attenuation discontinuities	18
7.3.4 Cable cut-off wavelength	18
7.3.5 Polarization mode dispersion (PMD)	19
7.4 Buffer tubes.....	19
7.5 Tensile strength elements.....	19
7.6 Crush protection elements.....	19
7.7 Water blocking elements.....	19
7.8 Sheath removal elements	19
7.9 Cable sheath.....	20
8 Measuring and test methods.....	20
8.1 General	20
8.2 Measuring methods for transmission and optical characteristics	20
8.3 Measuring methods for dimensions	20
8.4 Test methods for mechanical characteristics	21
8.5 Test methods for environmental characteristics	21
8.6 Test methods for cable element characterization	21
8.7 Measuring and test methods for electrical characteristics.....	21

Annex A (informative) Guidelines for specific optical fibre and cabled fibre performance.....	23
A.1 General	23
A.2 Cabled fibre attenuation requirements.....	23
A.3 Cabled fibre bandwidth requirements	24
A.4 Type testing at 1 625 nm	25
Annex B (informative) Guidelines for qualification sampling	26
B.1 General	26
B.2 Fibre selection for cable testing.....	26
B.3 Pass/fail criteria	27
Annex C (informative) Preferred temperatures	28
Bibliography	29
Table 1 – IEC 60794 structure	13
Table 2 – IEC 60794-1 series.....	14
Table 3 – IEC 60794-2 series.....	14
Table 4 – IEC 60794-3 series.....	15
Table 5 – IEC 60794-4 series.....	15
Table 6 – IEC 60794-5 series.....	15
Table 7 – IEC 60794-6 series.....	16
Table 8 – Indoor cables materials (examples).....	16
Table 9 – Outdoor cable materials (examples).....	17
Table 10 – Measuring methods for transmission and optical characteristics	20
Table 11 – Measuring methods for dimensions.....	21
Table 12 – Measuring methods for electrical characteristics.....	22
Table A.1 – Maximum single-mode cabled fibre attenuation coefficient (dB/km), as given by ITU-T	23
Table A.2 – Category A1- multimode fibre maximum cable attenuation coefficient (dB/km)	24
Table A.3 – Single-mode maximum cable attenuation coefficient (dB/km).....	24
Table A.4 – Category A1 multimode cabled fibre bandwidth (MHz·km).....	25
Table A.5 – Guidance values for 1 625 nm type test acceptance criteria.....	25
Table B.1 – Recommended minimum number of tested fibres in a cable.....	26
Table C.1 – Preferred low and high temperature.....	28

INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

Part 1-1: Generic specification – General

FOREWORD

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IEC 60794-1-1 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2015. This edition constitutes a technical revision.

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

- a) reorganization of the document to a more logical flow making it easier for the reader;
- b) expansion of the tables to include names and definitions of all documents in the IEC 60794-x series;
- c) expansion of the definitions, graphical symbols, terminology and abbreviations content, with the aim of making this document the default and reference for all others in the IEC 60794-x series;

- d) inclusion of updated, reorganized and expanded optical fibre, attenuation and bandwidth subclauses, with the aim of making this document the default and reference for all others in the IEC 60794-x series.

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

Draft	Report on voting
86A/2286/FDIS	86A/2313/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 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 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

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

OPTICAL FIBRE CABLES –

Part 1-1: Generic specification – General

1 Scope

This part of IEC 60794 applies to optical fibre cables for use with communication equipment and devices employing similar techniques. Electrical properties are specified for optical ground wire (OPGW) and optical phase conductor (OPPC) cables. Hybrid communication cables are specified in the IEC 62807 series.

The object of this document is to establish uniform generic requirements for the geometrical, transmission, material, mechanical, ageing (environmental exposure), climatic and electrical properties of optical fibre cables and cable elements, where appropriate.

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 60189-1, *Low-frequency cables and wires with PVC insulation and PVC sheath – Part 1: General test and measuring methods*

IEC 60304, *Standard colours for insulation for low-frequency cables and wires*

IEC 60793-1-21, *Optical fibres – Part 1-21: Measurement methods and test procedures – Coating geometry*

IEC 60793-1-22, *Optical fibres – Part 1-22: Measurement methods and test procedures – Length measurement*

IEC 60793-1-40, *Optical fibres – Part 1-40: Attenuation measurement methods*

IEC 60793-1-44, *Optical fibres – Part 1-44: Measurement methods and test procedures – Cut-off wavelength*

IEC 60793-1-46, *Optical fibres – Part 1-46: Measurement methods and test procedures – Monitoring of changes in optical transmittance*

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

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 60793-2-40:2021, *Optical fibres – Part 2-40: Product specifications – Sectional specification for category A4 multimode fibres*

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

IEC 60794-1-22¹, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental tests methods*

IEC 60811-201, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 201: General tests – Measurement of insulation thickness*

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*

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

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