IEC 62783-2

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Twinax cables for digital communications – Part 2: Family specification – Cable for Ethernet-over-twinax physical interfaces

Câbles twinax pour transmissions numériques – Partie 2: Spécification de famille – Câble pour interfaces physiques Ethernet sur twinax

IEC 62783-2:2019-01

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FOREWORD

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International Standard IEC 62783-2 has been prepared by subcommittee 46C: Wires and symmetric cables, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories.

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

FDIS	Report on voting
46C/1103/FDIS	46C/1108/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.

This International Standard is to be used in conjunction with the first edition of IEC 62783-1:—[1].

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://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- withdrawn,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.

[1] Under preparation. Stage at the time of publication: IEC FDIS 62783-1:2018.

INTRODUCTION

This International Standard is a family specification. It constitutes Part 2 of the IEC 62783 series, which covers specific characteristics of twinax cables.

This document describes cables that are in compliance with the generic twinax cable requirements given in IEC 62783-1.

The family of twinax cables covered in this document are specifically intended for interconnection of Ethernet links over twinax cables, which are implemented using twinax link segments in accordance with IEEE Std 802.3™ Ethernet physical interfaces, for example, 10GBASE-CX4.

TWINAX CABLES FOR DIGITAL COMMUNICATIONS –

Part 2: Family specification – Cable for Ethernet-over-twinax physical interfaces

1 Scope

This part of IEC 62783 covers indoor cables and specifies the definitions and requirements of twin-axial cables used in digital communication systems.

This document, which is a family specification, gives additional requirements for twinax cables for use in IEEE Std 802.3 Ethernet physical interfaces.

This document gives requirements and transmission characteristics for single twinax elements as well as for multiple twinax elements within the same sheath, i.e. "twinax cable".

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 TR 61156-1-2[2]:2009, *Multicore and symmetrical pair/quad cables for digital communications – Part 1-2: Electrical transmission characteristics and test methods of symmetrical pair/quad cables*
IEC TR 61156-1-2:2009/AMD1:2014

IEC 62783-1:—[3], *Twinax cables for digital communications – Part 1: Generic specification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62783-1 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

[2] A consolidated version of this publication exists, comprising IEC TR 61156-1-2:2009 and IEC TR 61156-1-2:2009/AMD 1:2014.

[3] Under preparation. Stage at the time of publication: IEC FDIS 62783-1:2018.