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Hybrid communication cables – Part 3-10: Outdoor hybrid cables – Family specification for FTTA hybrid communication cables

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HYBRID COMMUNICATION CABLES –

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FOREWORD

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IEC 62807-3-10 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. It is an International Standard.

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

Draft	Report on voting
46C/1246/FDIS	46C/1251/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.

This part of IEC 62807 is to be used in conjunction with IEC 62807-3:2023. It is based on the first edition of that document.

A list of all parts in the IEC 62807 series, published under the general title *Hybrid communication 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- withdrawn,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.

HYBRID COMMUNICATION CABLES –

Part 3-10: Outdoor hybrid cables – Family specification for FTTA hybrid communication cables

1 Scope

This part of IEC 62807 is a family specification for FTTA (Fibre-To-The-Antenna) outdoor hybrid communication cables. It specifies the design and construction, rated values and characteristics, requirements and test methods, packaging and quality assurance, etc.

The FTTA hybrid communication cables are typically but not only installed between the Base Band Unit (BBU) and Remote Radio Unit (RRU; or often called RRH – Remote Radio Head or AAU – Active Antenna Unit), and other scenario that supply electric current to optical communication equipment.

The FTTA hybrid communication cables contain optical fibre elements and current carrying elements under a common outer sheath or other constructions unifying the elements. The current carrying elements are used only to supply power to the equipment within the communication network. The current carrying elements are not used for electricity distribution or transmission, nor for power supply to domestic appliances.

The relationship between each of the MICE classifications in ISO/IEC 11801-1, the requirements and test methods of hybrid cables being proposed in a specific application are fully considered and aligned (see Annex A).

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 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60227-1, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

IEC 60228:2004, *Conductors of insulated cables*

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

IEC 60502-1, *Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV) − Part 1: Cables for rated voltages of 1 kV (Um = 1,2 kV) and 3 kV (Um = 3,6 kV)*

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*