

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Coaxial communication cables –
Part 4-1: Blank detail specification for radiating cables**

**Câbles coaxiaux de communication –
Partie 4-1: Spécification particulière-cadre pour câbles rayonnants**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COAXIAL COMMUNICATION CABLES –

Part 4-1: Blank detail specification for radiating cables

FOREWORD

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IEC 61196-4-1 has been prepared by subcommittee 46A: Coaxial cables, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 2016. This edition constitutes a technical revision.

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

- a) rewrote "1 Scope" to be consistent with other blank detail specifications of coaxial cables;
- b) added detail construction requirements of inner and outer conductor in "[7] Cable construction";
- c) added "Storage temperature range", "Installation temperature range" and "Stop frequency band" in "[8] Engineering information (reference only)";
- d) added "8.2.11 Link loss", "8.4.9 Adhesion of dielectric", "8.4.10 Shrinkage for insulations", "8.4.11 Maximum pulling force of cable";

- e) added different detail requirements or typical values in 8.2.4, 8.2.6 to 8.2.8, 8.3.1 to 8.3.4, 8.4.1, 8.4.3 to 8.4.8;
- f) deleted "7.4.4 Ovality of outer conductor".

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

Draft	Report on voting
46A/1584/FDIS	46A/1599/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/standardsdev/publications.

This part of IEC 61196 is to be read in conjunction with IEC 61196-1:2005 and IEC 61196-4:—1.

A list of all parts in the IEC 61196 series, published under the general title *Coaxial 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.

¹ Under preparation. Stage at the time of publication: IEC 61196-4/FDIS:2022.

COAXIAL COMMUNICATION CABLES –

Part 4-1: Blank detail specification for radiating cables

1 Scope

This part of IEC 61196 applies to radiating coaxial communication cables. These cables are intended for use in wireless communication system in long, narrow, semi-closed and indoor environment, such as tunnels, railways, highways, subways, elevators and other installation.

It determines the layout and style for detail specifications. Detail specifications, based on the blank detail specification, can be prepared by a national organization, a manufacturer or a user.

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 61196-1:2005, *Coaxial communication cables – Part 1: Generic specification: General, definitions and requirements*

IEC 61196-1-124², *Coaxial communication cables – Part 1-124: Electrical test methods – Test for coupling loss of radiating cable*

IEC 61196-4:³, *Coaxial communication cables – Part 4 Sectional specification for radiating cables*

3 Terms and definitions

No terms and definitions are provided in this document.

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>

4 Guidance for the preparation of detail specifications

The detail specification shall be written in accordance with the layout of the blank detail specification, which forms part of this document.

When a characteristic does not apply, then NA (for not applicable) is entered in the appropriate space.

² Under preparation. Stage at the time of publication: IEC/FDIS 61196-1-124:2022.

³ Under preparation. Stage at the time of publication: IEC/FDIS 61196-4:2022.