



Edition 2.0 2021-08 REDLINE VERSION

INTERNATIONAL STANDARD



Coaxial communication cables – Part 6-1: Blank detail specification for CATV drop cables

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.120.10

ISBN 978-2-8322-4879-9

Warning! Make sure that you obtained this publication from an authorized distributor.

– 2 – IEC 61196-6-1:2021 RLV © IEC 2021

CONTENTS

| FOREWORD | | | | |
|--|--|----|--|--|
| 1 | Scope | 5 | | |
| 2 | Normative references | 5 | | |
| 3 | Terms and definitions | 5 | | |
| 4 | Guidance for preparation of a detail specification | 5 | | |
| 5 | Blank detail specification | 6 | | |
| Annex A (normative) Cable identification and marking12 | | | | |
| A.1 Cable identification12 | | | | |
| | A.1.1 Type name | 12 | | |
| | A.1.2 Variants | 12 | | |
| | A.1.3 Screening classes | | | |
| A | A.2 Cable marking | 13 | | |
| Annex B (normative) Maximum attenuation14 | | | | |

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COAXIAL COMMUNICATION CABLES -

Part 6-1: Blank detail specification for CATV drop cables

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 61196-6-1:2009. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 61196-6-1 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 2009. This edition constitutes a technical revision.

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

a) Annex A, Cable identification and marking was added.

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

| FDIS | Report on voting |
|---------------|------------------|
| 46A/1497/FDIS | 46A/1515/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.

A list of all the parts in the IEC 61196 series, published under the general title *Coaxial communication cables*, can be found on the IEC website.

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.

It is to be used in conjunction with IEC 61196-1:2005 and IEC 61196-6:2021

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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

COAXIAL COMMUNICATION CABLES -

Part 6-1: Blank detail specification for CATV drop cables

1 Scope

This blank detail specification applies to <u>CATV</u> coaxial communication cables as described in IEC 61196-6. It specifies the requirements for drop cables for use in cabled television distribution networks operating at temperatures between -40 °C and +70 °C and in the frequency range from 5 MHz to 1 000 MHz or from 5 MHz to 3 000 MHz-as described in IEC 61196-6 and is to be read in conjunction with IEC 61196-1 and IEC 61196-6.

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 61196-6:2021, Coaxial communication cables – Part 6: Sectional specification for CATV drop cables

IEC 61196-1-310, Coaxial communication cables – Part 1-310: Mechanical test methods – Test for torsion characteristics of copper-clad metals

IEC 61196-1-314:2015, Coaxial communication cables – Part 1-314: Mechanical test methods – Test for bending

IEC 62153-4-4, Metallic communication cable test methods – Part 4-4: Electromagnetic compatibility (EMC) – Shielded screening attenuation, test method for measuring of the screening attenuation " a_s " up to and above 3 GHz.





Edition 2.0 2021-08

INTERNATIONAL STANDARD

Coaxial communication cables – Part 6-1: Blank detail specification for CATV drop cables



CONTENTS

| FOREWORD | | | | | |
|--|---|-------------------|----|--|--|
| 1 | Scope | | 5 | | |
| 2 | Normative | e references | 5 | | |
| 3 | Terms an | d definitions | 5 | | |
| 4 | Guidance for preparation of a detail specification5 | | | | |
| 5 | Blank detail specification6 | | | | |
| Annex A (normative) Cable identification and marking10 | | | | | |
| | A.1 Cable identification10 | | | | |
| | A.1.1 | Type name | 10 | | |
| | A.1.2 | Variants | 10 | | |
| | | Screening classes | | | |
| Α | .2 Cab | le marking | 11 | | |
| Ann | Annex B (normative) Maximum attenuation12 | | | | |

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COAXIAL COMMUNICATION CABLES –

Part 6-1: Blank detail specification for CATV drop cables

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61196-6-1 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 2009. This edition constitutes a technical revision.

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

a) Annex A, Cable identification and marking was added.

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

| FDIS | Report on voting |
|---------------|------------------|
| 46A/1497/FDIS | 46A/1515/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.

A list of all the parts in the IEC 61196 series, published under the general title *Coaxial communication cables*, can be found on the IEC website.

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.

It is to be used in conjunction with IEC 61196-1:2005 and IEC 61196-6:2021

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.

COAXIAL COMMUNICATION CABLES -

Part 6-1: Blank detail specification for CATV drop cables

1 Scope

This blank detail specification applies to coaxial communication cables as described in IEC 61196-6. It specifies the requirements for drop cables for use in cabled television distribution networks operating at temperatures between -40 °C and +70 °C and in the frequency range from 5 MHz to 1 000 MHz or from 5 MHz to 3 000 MHz.

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 61196-6:2021, Coaxial communication cables – Part 6: Sectional specification for CATV drop cables

IEC 61196-1-310, Coaxial communication cables – Part 1-310: Mechanical test methods – Test for torsion characteristics of copper-clad metals

IEC 61196-1-314:2015, Coaxial communication cables – Part 1-314: Mechanical test methods – Test for bending