

SLOVENSKI STANDARD SIST EN 61196-10:2016

01-april-2016

Nadomešča:

SIST EN 61196-2:2004

Komunikacijski koaksialni kabli - 10. del: Področna specifikacija poltogih kablov s politetrafluoretilenskim (PTFE) dielektrikom (IEC 61196-10:2014)

Coaxial communication cables - Part 10: Sectional specification for semi-rigid cables with polytetrafluoroethylene (PTFE) dielectric (IEC 61196-10:2014)

Koaxiale Kommunikationskabel - Teil 10: Rahmenspezifikation für halb-starre Kabel mit Polytetrafluorethylen- (PTFE-)Isolation (Standards.iteh.ai)

Câbles coaxiaux de communication <u>SPartie610/6Spécifi</u>cation intermédiaire relative aux câbles semi-rigides <u>avec diélectrique en polytétrafluoroéthylène</u> (PTFE)

72499de6f06e/sist-en-61196-10-2016

Ta slovenski standard je istoveten z: EN 61196-10:2016

ICS:

33.120.10 Koaksialni kabli. Valovodi Coaxial cables. Waveguides

SIST EN 61196-10:2016 en

SIST EN 61196-10:2016

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61196-10:2016

https://standards.iteh.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-72499de6f06e/sist-en-61196-10-2016

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN 61196-10

January 2016

ICS 33.120.10

Supersedes EN 61196-2:2003

English Version

Coaxial communication cables - Part 10: Sectional specification for semi-rigid cables with polytetrafluoroethylene (PTFE) dielectric (IEC 61196-10:2014)

Câbles coaxiaux de communication - Partie 10: Spécification intermédiaire relative aux câbles semi-rigides avec diélectrique en polytétrafluoroéthylène (PTFE) (IEC 61196-10:2014) Koaxiale Kommunikationskabel - Teil 10: Rahmenspezifikation für halb-starre Kabel mit Polytetrafluorethylen- (PTFE-)Isolation (IEC 61196-10:2014)

This European Standard was approved by CENELEC on 2015-10-05. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

https://standards.iteh.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 61196-10:2016

European foreword

The text of document 46A/1213/FDIS, future edition 1 of IEC 61196-10, prepared by SC 46A "Coaxial cables" of IEC/TC 46 "Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61196-10:2016.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document have to be withdrawn

This document supersedes EN 61196-2:2003.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61196-10:2014 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

<u>SIST EN 61196-10:2016</u> https://standards.iteh.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-72499de6f06e/sist-en-61196-10-2016

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1	1994
+ A1	1992	and gardanes	-	-
IEC 61169-4	-	Radio-frequency connectors Part 4: R.F coaxial connectors with inner diameter of outer conductor 16 mm (0,63 in) with scre lock - Characteristic impedance 50 ohms (type 7-16)		-
IEC 61196-1	2005	Coaxial communication cables - Part 1: Generic specification - General, definitions and requirements	s	-
IEC 61196-1-1	- iT	Coaxial communication cables - Part 1-1: Capability approval for coaxial cables	EW	-
IEC 61196-1-101	-	Coaxial communication cables - Part 1- 101: Electrical test methods - Test for conductor DC resistance of cable	-	-
IEC 61196-1-102	-	Coaxial communication cables 6 Part 1-	_	_
	https://sta	nn102; Electrical test methods a8Test for 5a4 insulation resistance of cable dielectric	-433d-a723-	
IEC 61196-1-103	-	Coaxial communication cables - Part 1- 103: Electrical test methods - Test for capacitance of cable	-	-
IEC 61196-1-105	-	Coaxial communication cables - Part 1- 105: Electrical test methods - Test for withstand voltage of cable dielectric	-	-
IEC 61196-1-108	-	Coaxial communication cables - Part 1- 108: Electrical test methods - Test for characteristic impedance, phase and groundled, electrical length and propagation velocity	- IP	-
IEC 61196-1-112	-	Coaxial communication cables - Part 1- 112: Electrical test methods - Test for return loss (uniformity of impedance)	-	-
IEC 61196-1-113	-	Coaxial communication cables - Part 1- 113: Electrical test methods - Test for attenuation constant	-	-
IEC 61196-1-115	-	Coaxial communication cables - Part 1- 115: Electrical test methods - Test for regularity of impedance (pulse/step function return loss)	-	-
IEC 61196-1-301	-	Coaxial communication cables Part 1-301: Mechanical test methods - Test for ovality	-	-
IEC 61196-1-302	-	Coaxial communication cables - Part 1-302: Mechanical test methods - Test for eccentricity	-	-

EN 61196-10:2016

IEC 61196-1-313	-	Coaxial communication cables - Part 1- 313: Mechanical test methods - Adhesion of dielectric and sheath	-	-
IEC 61196-1-314	-	Coaxial communication cables - Part 1-314: Mechanical test methods - Test for bending	-	-
IEC 61196-1-318	-	Coaxial communication cables - Part 1- 318: Mechanical test methods - Heat performance tests	-	-
IEC 62037-4	2012	Passive RF and microwave devices, intermodulation level measurement Part 4: Measurement of passive intermodulation in coaxial cables		2012
IEC 62230 ISO 2859-1	2006 1999	Electric cables - Spark-test method Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	EN 62230 -	2007

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61196-10:2016

https://standards.iteh.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-72499de6f06e/sist-en-61196-10-2016



IEC 61196-10

Edition 1.0 2014-09

INTERNATIONAL STANDARD

Coaxial communication cables - NDARD PREVIEW Part 10: Sectional specification for semi-rigid cables with polytetrafluoroethylene (PTFE) dielectric

<u>SIST EN 61196-10:2016</u> https://standards.iteh.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-72499de6f06e/sist-en-61196-10-2016

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRICE CODE

Q

ICS 33.120.10 ISBN 978-2-8322-1866-2

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

CONTENTS

F	OREWO	RD	3
1	Scop	e	5
2	Norm	native references	5
3	Term	s and definitions	6
4	Mate	rials and cable construction	6
	4.1	Cable construction	_
	4.2	Inner conductor	
	4.3	Dielectric	
	4.4	Outer conductor	
	4.5	Sheath (when applicable)	
5	Stand	dard rating and characteristics	
	5.1	Characteristic impendence	
	5.2	Rated temperature range	
6	Ident	ification, marking and labeling	
	6.1	Cable identification	
	6.1.1		
	6.1.2	· · · · · · · · · · · · · · · · · · ·	
	6.2	Variants IEC marking Teh STANDARD PREVIEW	8
	6.3	Labelling (standards.iteh.ai)	
7	Requ	irements of finished cables	8
	7.1	General	8
	7.2	Electrical requirements (see Table 4) rds/sist/a8abe29e-b5a4-433d-a723-	
	7.3	Environmental requirements (see Table 2) 96-10-2016	
	7.4	Mechanical requirements (see Table 3)	10
8	Deliv	ery and storage	11
Α	nnex A (informative) Quality assessment	12
	A.1	General	12
	A.2	Qualification approval and its maintenance	12
	A.2.2	Capability approval	14
	A.2.3	Quality conformance inspection	14
	A.2.4	Periodic inspection	16
В	bliograp	hy	17
Ta	able 1 –	Electrical requirements	9
Т	able 2 –	Environmental requirements	10
		Mechanical requirements	
		– Qualification inspection	
		Quality conformance inspection	
		. ,	

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COAXIAL COMMUNICATION CABLES -

Part 10: Sectional specification for semi-rigid cables with polytetrafluoroethylene (PTFE) dielectric

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 liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization 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. (Standards.1121.21)
- 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. https://standards.itch.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-
- 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.
- 9) 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.

International Standard IEC 61196-10 has been prepared by subcommittee 46A: Coaxial cables, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This first edition cancels and replaces IEC 61196-2 published in 1995. This edition constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting	
46A/1213/FDIS	46A/1232/RVD	

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

-4 -

IEC 61196-10:2014 © IEC 2014

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This publication is to be read in conjunction with IEC 61196-1:2005.

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 publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication may be issued at a later date.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 61196-10:2016</u> https://standards.iteh.ai/catalog/standards/sist/a8abe29e-b5a4-433d-a723-72499de6f06e/sist-en-61196-10-2016

COAXIAL COMMUNICATION CABLES -

Part 10: Sectional specification for semi-rigid cables with polytetrafluoroethylene (PTFE) dielectric

1 Scope

This part of IEC 61196 applies to semi-rigid coaxial communication cables with polytetrafluoroethylene (PTFE) dielectric and tubular outer conductor. These cables are intended for use in microwave and wireless equipments or other signal transmission equipments or units at frequencies above 500 MHz. It is to be read in conjunction with IEC 61196-1:2005.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

iTeh STANDARD PREVIEW
88 Environmental testing — Part 1: General and guidance

IEC 60068-1:1988, Environmental testing – Part 1: General and guidance IEC 60068-1:1988/AMD 1:1992 (standards.iteh.ai)

IEC 61169-4, Radio-frequency connectors Part 4: RF1 coaxial connectors with inner diameter of outer conductor 16 mm (0.63 in) with screw lock as Characteristic impedance 50 Ω (type 7-16)

72499de606e/sist-en-61196-10-2016

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

IEC 61196-1-1, Coaxial communication cables – Part 1-1: Capability approval for coaxial cables

IEC 61196-1-101, Coaxial communication cables – Part 1-101: Electrical test methods – Test for conductor d.c. resistance of cable

IEC 61196-1-102, Coaxial communication cables – Part 1-102: Electrical test methods – Test for insulation resistance of cable dielectric

IEC 61196-1-103, Coaxial communication cables – Part 1-103: Electrical test methods – Test for capacitance of cable

IEC 61196-1-105, Coaxial communication cables – Part 1-105: Electrical test methods – Test for withstand voltage of cable dielectric

IEC 61196-1-108, Coaxial communication cables – Part 1-108: Electrical test methods – Test for characteristic impedance, phase and group delay, electrical length and propagation velocity

IEC 61196-1-112, Coaxial communication cables – Part 1-112: Electrical test methods – Test for return loss (uniformity of impedance)