

SLOVENSKI STANDARD SIST EN 61319-1:1999

01-april-1999

Interconnections of satellite receiving equipment -- Part 1: Europe (IEC 61319-1:1995)

Interconnections of satellite receiving equipment -- Part 1: Europe

Zusammenschaltungen von Satelliten-Empfangsgeräten -- Teil 1: Europa

Interconnexions des équipements de réception satellite -- Partie 1: Europe (standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 61319-1:1996

https://standards.iteh.ai/catalog/standards/sist/487d3dde-3056-4dbb-

b379-72c51008824a/sist-en-61319-1-1999

ICS:

33.060.30 Radiorelejni in fiksni satelitski Radio relay and fixed satellite

komunikacijski sistemi communications systems

SIST EN 61319-1:1999 en

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61319-1:1999

https://standards.iteh.ai/catalog/standards/sist/487d3dde-3056-4dbb-b379-72c51008824a/sist-en-61319-1-1999

EUROPEAN STANDARD

EN 61319-1

NORME EUROPÉENNE EUROPÄISCHE NORM

January 1996

ICS 31.220.10; 33.060.30; 33.160.20

Descriptors: Radiocommunication, satellite broadcasting, telecasting, radio equipment, television receivers, interfaces, antenna

conductor, appliance interconnections, specifications

English version

Interconnections of satellite receiving equipment

Part 1: Europe

(IEC 1319-1:1995)

Interconnexions des équipements de réception satellite

Partie 1: Europe (CEI 1319-1:1995)

Zusammenschaltungen von Satelliten-Empfangsgeräten

Teil 1: Europa

(IEC 1319 1:1995)

This European Standard was approved by CENELEC on 1995-11-28. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

^{© 1996} Copyright reserved to CENELEC members

Foreword

The text of document 84/420/FDIS, future edition 1 of IEC 1319-1, prepared by IEC TC 84, Equipment and systems in the field of audio, video and audiovisual engineering, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61319-1 on 1995-11-28.

(dop) 1996-09-01

(dow) 1996-09-01

The following dates were fixed:

- latest date by which the EN 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 EN have to be withdrawn

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given for information only. In this standard, annex ZA is normative and annex A is informative. Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 1319-1:1995 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments)

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 65 (mod)	1985	Safety requirements for mains operated electronic and related apparatus for household and similar general use	RD P s.itel	
+ A3 (mod)	1992	87d3dde- 19-1-1999	EN 60065 ¹⁾ + corr. November	1993 1993
IEC 130-9	1989	Connectors for frequencies below 3 MHz Part 9: Circular connectors for radio and associated sound equipment	TEW .	
+ A1	1993	ф	EN 60130-9	1995
IEC 169-2	1965	Radio-frequency connectors Part 2: Coaxial unmatched connector		
+ A1	1982	ture 2. Souther difficultied conflector	HD 134.2 S2	1984
IEC 169-24	1991	Part 24: Radio-frequency coaxial connectors with screw coupling, typically for use in 75 ohm cable distribution systems (Type F)	EN 60169-24	1993
IEC 268-11	1987	Sound system equipment Part 11: Application of connectors for the interconnection of sound system components		
+ A2	1991	Components	HD 483.11 S3 ²¹	1993
IEC 268-15	1987	Part 15: Preferred matching values for the interconnection of sound system components		
+ A3	1991		HD 483.15 S43)	1992

¹⁾ EN 60065 includes A1:1987 + A2:1989 + A3:1992 to IEC 65.

²⁾ HD 483.11 S3 includes A1:1989 + A2:1991 to IEC 268-11.

³⁾ HD 483.15 S4 includes A1:1989 + A2:1990 + A3:1991 to IEC 268-15.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 807-9	1993	Rectangular connectors for frequencies below 3 MHz Part 9: Detail specification for a range of peritelevision connectors	-	-
IEC 933-1	1988	Audio, video and audiovisual systems Interconnections and matching values Part 1: 21 pin connector for video systems	iTeh	-
A1	1992	Application No. 1 b379-72	ST/ (sta	-
IEC 933-4	1994	Part 4: Connector and cordset for domestic digital bus (D2B)	EN 60933-4	1994
IEC 958 A1	1989 1993	Digital audio interface 24a/sist-e	EN 60958	1990 1994
IEC 1030	1991	Audio, video and audiovisual systems Domestic Digital Bus (D2B)) P)	
+ A1	1993	Domestic Digital Bus (D2B) 51319-1-1999	EN 61030	1993

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 1319-1

Première édition First edition 1995-11

Interconnexions des équipements de réception satellite –

Partie 1:

iTeh Surapedard Preview

(standards.iteh.ai)

Interconnections of satellite receiving equipment — rds.iteh.ai/catalog/standards/sist/487d3dde-3056-4dbb-

https://standards.iteh.ai/catalog/standards/sist/487d3dde-3 b379-72c51008824a/sist-en-61319-1-1999

Part 1: Europe

© CEI 1995 Droits de reproduction réservés — Copyright – all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse



Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

∃ ●

S

CONTENTS

		Page
FO	REWORD	7
INT	RODUCTION	9
Clau	nse	
1	Scope	11
2	Normative references	15
3	Explanation of terms and abbreviations	17
4	Interface requirements for polarizers and polarswitchers	19
	4.1 Mechanical polarizers (optional)	19
	4.2 Magnetic polarizers (using the Faraday effect)	21
	4.2.1 Polarizers for two orthogonal polarizations	21
	4.2.2 Polarizers for four polarizations	21
	4.3 Polarswitchers	21
5	Interface requirements for low-noise block converters (LNB)	21
၁		21
	5.1 Characteristic impedance of the first intermediate frequency (IF) output	21
	part), case 1: one IF input signal and one two-state control command	23
	5.2.1 Single-hand block converters	23
	5.2.1 Single-band block converters	23
	5.2.2 Dual-band block converters	20
	5.2.3 Combination of dual-band block converter with polarswitcher	23
	part), case 2: two (Finput signals and internal two-state control command	25
	5.4 Connectors <u>b379-72c51008824a/sist-en-61319-1-1999</u>	27
6	Interface requirements for switching between different antenna sources or antenna	
•	positions	29
	6.1 Electrical matching values for the actuator motor supply	31
	6.1 Electrical matching values for the actuator motor supply	31
	6.2 Electrical matching values for the antenna position sensor	
	6.3 Interface between the antenna position control unit and the satellite receiver	33
	6.3.1 Circular connector	33
	6.3.2 Domestic Digital Bus (D2B)	35
7	Interface requirements for satellite receivers and external decoders, descramblers	
	and conditional access systems	37
8	Interface requirements for Digital Satellite Radio (DSR) receivers	37
U	· · · · · · · · · · · · · · · · · · ·	37
	8.1 Configuration of receiving equipment	
	8.1.1 Direct reception of radio only	37
	8.1.2 Direct reception of radio and television	
	8.1.3 Cable reception	
	8.2 Audio-frequency outputs of DSR receivers	41
ΔN	INEX A – Interconnections between a satellite receiver and a decoder	43

Figi	ures	Page
1	Diagram of a typical system	13
2	Control signal for polarswitcher, combined with dual-band block converter, superimposed on supply voltage	25
3	Interface of the LNB first IF output with the receiver input	25
4	Example of system configuration with motorized antenna	29
5	Antenna position sensor interfaces	31
6	Contact numbering of control interface connector, using a circular connector	33
7	Example of configuration using D2B interface	35
8	Typical DSR receiver system configurations	39
9	Typical receiver system for reception of radio and television	39
10	Example of a receiver system for cable connection	41
A.1	Interconnections between a satellite receiver and a data decoder iTeh STANDARD PREVIEW	45
	(standards.iteh.ai)	

<u>SIST EN 61319-1:1999</u> https://standards.iteh.ai/catalog/standards/sist/487d3dde-3056-4dbb-b379-72c51008824a/sist-en-61319-1-1999

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INTERCONNECTIONS OF SATELLITE RECEIVING EQUIPMENT —

Part 1: Europe

FOREWORD

- The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter. https://standards.itch.ai/catalog/standards/sist/487d3dde-3056-4dbb-b379-72c51008824a/sist-en-61319-1-1999
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 1319-1 has been prepared by IEC technical committee 84: Equipment and systems in the field of audio, video and audiovisual engineering.

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

DIS	Report on voting	
84/420/FDIS	84/447/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.

Annex A is for information only.

INTRODUCTION

Informal interconnection standards for satellite receiving equipment exist in Europe, North America and Japan, and they are not sufficiently similar to allow one common IEC standard to be achieved. Consequently, it has proved necessary to produce three standards:

IEC 1319-1, Interconnections of satellite receiving equipment - Part 1: Europe

IEC 1319-2, Interconnections of satellite receiving equipment - Part 2: Japan

IEC 1319-3, Interconnections of satellite receiving equipment - Part 3: North America

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 61319-1:1999</u> https://standards.iteh.ai/catalog/standards/sist/487d3dde-3056-4dbbb379-72c51008824a/sist-en-61319-1-1999