

SLOVENSKI STANDARD
SIST EN 60728-7-1:2006/A1:2015
01-oktober-2015

Kabelska omrežja za televizijske in zvokovne signale ter interaktivne storitve - 7-1. del: Nadzorovanje stanja zunanjih inštalacij omrežij hibridnih optično-koaksialnih kablov - Specifikacija fizične (PHY) plasti

Cable networks for television signals, sound signals and interactive services -- Part 7-1: Hybrid Fibre Coax Outside Plant Status Monitoring - Physical (PHY) Layer Specification

Kabelnetze für Fernsehsignale, Tonsignale und interaktive Dienste -- Teil 7-1: Zustandsüberwachung Hybrid-Faser-Koax-Netze (HFC) - Festlegung Bitübertragungsschicht (PHY) (standards.iteh.ai)

Réseaux de distribution par câbles pour signaux de télévision, signaux de radiodiffusion sonore et services interactifs -- Partie 7-1: Surveillance de l'état des installations extérieures des réseaux hybrides à fibre optique et câble coaxial - Spécification de la couche physique

Ta slovenski standard je istoveten z: EN 60728-7-1:2005/A1:2015

ICS:

33.060.40	Kabelski razdelilni sistemi	Cabled distribution systems
35.100.10	Fizični sloj	Physical layer

SIST EN 60728-7-1:2006/A1:2015 en,fr,de

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EUROPEAN STANDARD

EN 60728-7-1:2005/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2015

ICS 33.040; 33.160; 35.100.10

English Version

Cable networks for television signals, sound signals and
interactive services - Part 7-1: Hybrid Fibre Coax Outside Plant
Status Monitoring - Physical (PHY) Layer Specification
(IEC 60728-7-1:2003/A1:2015)

Réseaux de distribution par câbles pour signaux de
télévision, signaux de radiodiffusion sonore et services
interactifs - Partie 7-1: Surveillance de l'état des
installations extérieures des réseaux hybrides à fibre
optique et câble coaxial - Spécification de la couche
physique
(IEC 60728-7-1:2003/A1:2015)

Kabelnetze für Fernsehsignale, Tonsignale und interaktive
Dienste - Teil 7-1: Zustandsüberwachung Hybrid-Faser-
Koax-Netze (HFC) - Festlegung Bitübertragungsschicht
(PHY)
(IEC 60728-7-1:2003/A1:2015)

This amendment A1 modifies the European Standard EN 60728-7-1:2005; it was approved by CENELEC on 2015-06-03. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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.

<https://standards.iteh.ai/catalog/standards/sist/64088f59-f8aa-42c4-9cb2->

This amendment 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.

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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 60728-7-1:2005/A1:2015**European foreword**

The text of document 100/2417/FDIS, future edition 1 of IEC 60728-7-1:2003/A1, prepared by Technical Area 5 "Cable networks for television signals, sound signals and interactive services" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60728-7-1:2005/A1:2015.

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 (dop) 2016-03-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-06-03

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 60728-7-1:2003/A1:2015 was approved by CENELEC as a European Standard without any modification.

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IEC 60728-7-1

Edition 1.0 2015-04

INTERNATIONAL STANDARD

AMENDMENT 1

**Cable networks for television signals, sound signals and interactive services –
Part 7-1: Hybrid Fibre Coax Outside Plant status monitoring – Physical (PHY)
Layer Specification**

[SIST EN 60728-7-1:2006/A1:2015](https://standards.iteh.ai/catalog/standards/sist/64088f59-f8aa-42c4-9cb2-4442d98674c5/sist-en-60728-7-1-2006-a1-2015)

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FOREWORD

This amendment has been prepared by technical area 5: Cable networks for television signals, sound signals and interactive services, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

FDIS	Report on voting
100/2417/FDIS	100/2481/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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.

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

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INTRODUCTION

Replace the text of the existing INTRODUCTION, except for the ultimate paragraph, by the following new paragraphs:

Standards and other deliverables of the IEC 60728 series deal with cable networks including equipment and associated methods of measurement for headend reception, processing and distribution of television and sound signals and for processing, interfacing and transmitting all kinds of data signals for interactive services using all applicable transmission media. These signals are typically transmitted in networks by frequency-multiplexing techniques.

This includes for instance

- regional and local broadband cable networks,
- extended satellite and terrestrial television distribution systems,
- individual satellite and terrestrial television receiving systems,

and all kinds of equipment, systems and installations used in such cable networks, distribution and receiving systems.

The extent of this standardization work is from the antennas and/or special signal source inputs to the headend or other interface points to the network up to the terminal input of the customer premises equipment.

The standardization work will consider coexistence with users of the RF spectrum in wired and wireless transmission systems.

Replace in the ultimate paragraph "...and accessories therefore is excluded." by "...and accessories thereof is excluded."

3 Terms, definitions and abbreviations

3.1

Replace the term "forward spectrum" by "forward path band", and every occurrence of the term accordingly.

Replace, in the definition of 3.1 (forward path band), "the pass-band of frequencies" by "continuous set of frequencies" and the values "300 MHz to 860 MHz" by "300 MHz to 1 000 MHz".

Add the following new Note to entry:

Note 1 to entry: Due to different channel spacing plans in use, this upper frequency limit may not be exactly 1 000 MHz, but some megahertz higher, e.g. 1 002 MHz or 1 006 MHz. The notation 1 000 MHz in this standard is intended to include such small deviations.

3.2

Replace the term "full spectrum" by "full path band", and every occurrence of the term accordingly.

Replace the definition of 3.2 (full path band) by the following:

combination of forward path band and return path band in HFC cable systems, excluding any guard band

3.7

Replace the term "return spectrum" by "return path band", and every occurrence of the term accordingly.

Replace, in the definition of 3.7 (return path band), "the pass-band of frequencies" by "continuous set of frequencies".

4.2.1 Forward and return spectrum

Replace the title of 4.2.1 by "Forward path band and return path band".

Replace, in the first paragraph, the first sentence by the following new sentence:

The forward path band in HFC cable systems refers to the continuous set of frequencies with a lower edge of between 48 MHz and 87,5 MHz, depending on the particular geographical area, and an upper edge that is typically in the range of 300 MHz to 1 000 MHz depending on implementation.

Table 3 – Spectral limits by geographical area

Add "(North America and Europe)" to the end of the title of Table 3.

Replace the values of the last column "Maximum frequency" as follows:

North America	1 000 MHz
Europe 1	862 MHz
Europe 2	1 000 MHz
Europe 3	1 000 MHz

Table 4 – HMS PHY channel RF and modulation specifications

Replace, in the 22nd row, first column, “Receiver C/(N+I) (for BER better than 10)” by “for BER better than 10⁻⁶” to read:

Receiver C/(N+I)
(for BER better than 10⁻⁶)

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