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SIST EN 60728-7-3:2010

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60728-7-3

December 2009

ICS 33.040; 33.160

Supersedes EN 60728-7-3:2005

English version

**Cable networks for television signals,
sound signals and interactive services -
Part 7-3: Hybrid fibre coax outside plant status monitoring -
Power supply to transponder interface bus (PSTIB)
(IEC 60728-7-3:2009)**

Réseaux de distribution par câbles
pour signaux de télévision,
signaux de radiodiffusion sonore
et services interactifs -
Partie 7-3: Surveillance de l'état
des installations extérieures
des réseaux hybrides à fibre optique et
câble coaxial -
Alimentation du bus d'interface
du répéteur
(CEI 60728-7-3:2009)

Kabelnetze für Fernsehsignale,
Tonsignale und interaktive Dienste -
Teil 7-3: Zustandsüberwachung
Hybrid-Faser-Koax-Netze (HFC) -
Schnittstellenbus von Fernspeise-
Stromversorgung zu Transponder (PSTIB)
(IEC 60728-7-3:2009)

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This European Standard was approved by CENELEC on 2009-11-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 100/1464/CDV, future edition 2 of IEC 60728-7-3, 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 was approved by CENELEC as EN 60728-7-3 on 2009-11-01.

This European Standard supersedes EN 60728-7-3:2005.

EN 60728-7-3:2009 includes the following significant technical changes with respect to EN 60728-7-3:2005:

- all changes from standard ANSI/SCTE 25-3 v1.0 to standard ANSI/SCTE 25-3 v1.1 (2005) have been taken into account in EN 60728-7-3:2009;
- Clause 7 is based on standard ANSI/SCTE 110 (2005);
- addition of informative Annex A concerning hybrid management sub-layer.

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 (dop) 2010-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-11-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 60728-7-3:2009 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60728-7-1	NOTE Harmonized as EN 60728-7-1:2005 (not modified).
IEC 60728-7-2	NOTE Harmonized as EN 60728-7-2:2005 (not modified).
IEC 60728-7-3	NOTE Harmonized as EN 60728-7-3:2005 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60603-7	- ¹⁾	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	EN 60603-7	2009 ²⁾

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¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTERNATIONAL STANDARD



**Cable networks for television signals, sound signals and interactive services –
Part 7-3: Hybrid fibre coax outside plant status monitoring – Power supply to
transponder interface bus (PSTIB)**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CABLE NETWORKS FOR TELEVISION SIGNALS,
SOUND SIGNALS AND INTERACTIVE SERVICES –****Part 7-3: Hybrid fibre coax outside plant status monitoring –
Power supply to transponder interface bus (PSTIB)**

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.
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International Standard IEC 60728-7-3 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.

This second edition cancels and replaces the first edition published in 2003 of which it constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition:

- All changes from standard ANSI/SCTE 25-3 v1.0 to standard ANSI/SCTE 25-3 v1.1 (2005) have been taken into account in this second edition.
- Clause 7 is based on standard ANSI/SCTE 110 (2005).
- Addition of informative Annex A concerning hybrid management sub-layer.

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

CDV	Report on voting
100/1464/CDV	100/1599/RVC

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

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

A list of all parts of the IEC 60728 series, under the general title *Cable networks for television signals, sound signals and interactive services*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

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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.

INTRODUCTION

Standards of the IEC 60728 series deal with cable networks including equipment and associated methods of measurement for headend reception, processing and distribution of television signals, sound signals and their associated data signals and for processing, interfacing and transmitting all kinds of signals for interactive services using all applicable transmission media.

This includes

- CATV¹-networks;
- MATV-networks and SMATV-networks;
- individual receiving networks;

and all kinds of equipment, systems and installations installed in such networks.

The extent of this standardization work is from the antennas and/or special signal source inputs to the head-end or other interface points to the network up to the terminal input.

The standardization of any user terminals (i.e. tuners, receivers, decoders, multimedia terminals, etc.) as well as of any coaxial, balanced and optical cables and accessories thereof is excluded.

The following differences exist in some countries:

The Japanese *de facto* standard (NCTEA S-006) concerning requirements for the HFC outside plant management, which was published in 1995, has already been available in Japan. The purpose of this standard is to support the design and implementation of interoperable management systems for HFC cable networks used in Japan.

¹ This word encompasses the HFC networks used nowadays to provide telecommunications services, voice, data, audio and video both broadcast and narrowcast.