



**NSAI**  
Standards

Irish Standard  
I.S. EN 61935-2:2010

Specification for the testing of  
balanced and coaxial information  
technology cabling -- Part 2: Cords as  
specified in ISO/IEC 11801 and related  
standards (IEC 61935-2:2010 (EQV))

## I.S. EN 61935-2:2010

*Incorporating amendments/corrigenda issued since publication:*

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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<p><b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9</p>	<p>T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie  W NSAI.ie</p>	<p><b>Sales:</b> T +353 1 857 6730 F +353 1 857 6729 W standards.ie</p>
<p>Údarás um Chaighdeáin Náisiúnta na hÉireann</p>		

English version

**Specification for the testing of balanced and coaxial information  
technology cabling -  
Part 2: Cords as specified in ISO/IEC 11801 and related standards  
(IEC 61935-2:2010)**

Spécification relative aux essais  
des câblages symétriques et coaxiaux  
des technologies de l'information -  
Partie 2: Cordons tels que spécifiés  
dans l'ISO/CEI 11801 et normes  
associées  
(CEI 61935-2:2010)

Spezifikation für die Prüfung  
der symmetrischen und koaxialen  
informationstechnischen Verkabelung –  
Teil 2: Schnüre nach ISO/IEC 11801  
und entsprechenden Normen  
(IEC 61935-2:2010)

This European Standard was approved by CENELEC on 2010-09-01. 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.

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**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 46/351/FDIS, future edition 3 of IEC 61935-2, prepared by 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 was approved by CENELEC as EN 61935-2 on 2010-09-01.

This European Standard supersedes EN 61935-2:2005.

This EN 61935-2:2010 differs from EN 61935-2:2005 in that it covers category 6<sub>A</sub> to category 7<sub>A</sub> cords as defined in ISO/IEC 11801.

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

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) 2011-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-09-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61935-2:2010 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 60068-2-68      NOTE Harmonized as EN 60068-2-68.  
IEC 60512-27-100<sup>1)</sup>      NOTE Harmonized as EN 60512-27-100<sup>1)</sup>.

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<sup>1)</sup> At draft stage.

## 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 60068-2-61	-	Environmental testing - Part 2: Test methods - Test Z/ABDM: Climatic sequence	EN 60068-2-61	-
IEC 60603-7	Series	Connectors for electronic equipment - Part 7: Detail specifications	EN 60603-7	Series
IEC 60603-7	2008	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	EN 60603-7	2009
IEC 60603-7-51	-	Connectors for electronic equipment - Part 7-51: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 500 MHz	EN 60603-7-51	-
IEC 61076-3-104	-	Connectors for electronic equipment - Product requirements - Part 3-104: Detail specification for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 1 000 MHz	EN 61076-3-104	-
IEC 61076-3-110	-	Connectors for electronic equipment - Product requirements - Part 3-110: Rectangular connectors - Detail specification for shielded, free and fixed connectors for data transmission with frequencies up to 1 000 MHz	EN 61076-3-110	-
IEC 61156	Series	Multicore and symmetrical pair/quad cables for digital communications	-	-
IEC 61156-1	-	Multicore and symmetrical pair/quad cables for digital communications - Part 1: Generic specification	-	-
IEC 61156-6	-	Multicore and symmetrical pair/quad cables for digital communications - Part 6: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Work area wiring - Sectional specification	-	-
IEC 61935-1 (mod)	2009	Specification for the testing of balanced and coaxial information technology cabling - Part 1: Installed balanced cabling as specified in ISO/IEC 11801 and related standards	EN 61935-1	2009

**I.S. EN 61935-2:2010**

EN 61935-2:2010

- 4 -

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62153-4-11	-	Metallic communication cable test methods - Part 4-11: Electromagnetic compatibility (EMC) - Coupling attenuation or screening attenuation of patch cords, coaxial cable assemblies, pre-connectorized cables - Absorbing clamp method	-	-
ISO/IEC 11801	-	Information technology - Generic cabling for customer premises	-	-

## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references .....	7
3 Terms and definitions .....	8
4 General requirements and test configuration .....	8
4.1 Cable and connector design .....	8
4.2 Balanced cord, cable and connector tests .....	8
4.3 Test configuration and equipment.....	8
4.4 Balanced cord tests requirements .....	9
5 Acceptance tests .....	10
5.1 Visual inspection .....	10
5.2 Wire map.....	11
5.3 Propagation delay .....	12
5.4 Delay skew.....	12
5.5 Insertion loss.....	12
5.6 Return loss.....	12
5.7 Near end crosstalk (NEXT).....	13
5.8 Assumptions used in the development of cord requirements.....	16
6 Balanced cord test procedure – Network analyser test configuration .....	16
7 Periodic tests .....	17
7.1 General .....	17
7.2 Tensile strength .....	17
7.3 Flexure.....	18
7.4 Bending.....	19
7.5 Twisting.....	19
7.6 Crushing .....	20
7.7 Dust test.....	21
7.8 Coupling attenuation .....	23
7.9 Climatic sequence.....	24
8 Test head requirements.....	24
8.1 General.....	24
8.2 Minimum requirements for all test head designs .....	24
8.3 Additional FEXT requirements for balanced connector compatible test heads.....	25
8.4 Additional return loss requirements for balanced connector compatible test heads.....	25
8.5 NEXT loss centering requirements for balanced connector compatible test heads.....	25
Bibliography.....	27

Figure 1 – Test configuration for balanced cord for NEXT and return loss measurements .....	9
Figure 2 – Correct pairing .....	11
Figure 3 – Incorrect pairing .....	11
Figure 4 – Initial marking of the cable sheath .....	17
Figure 5 – Final visual inspection .....	17
Figure 6 – Fixture for balanced cord flexure test .....	18
Figure 7 – Bending test: assembly in U shape .....	19
Figure 8 – Twisting test: assembly in U shape .....	20
Figure 9 – Fixture for cable crushing test .....	21
Figure 10 – Measuring device .....	23
Figure 11 – Centering of NEXT properties of the balanced connector test head .....	26
Table 1 – Return loss requirements .....	13
Table 2 – Balanced cord return loss requirements at key frequencies .....	13
Table 3 – Category 5 balanced cord NEXT requirements at key frequencies .....	15
Table 4 – Category 6 balanced cord NEXT requirements at key frequencies .....	15
Table 5 – Category 6 <sub>A</sub> balanced cord NEXT requirements at key frequencies .....	15
Table 6 – Category 7 balanced cord NEXT requirements at key frequencies .....	15
Table 7 – Category 7 <sub>A</sub> balanced cord NEXT requirements at key frequencies .....	15
Table 8 – Assumptions for cabling components used in the development of NEXT and return loss requirements .....	16
Table 9 – Coupling attenuation limits .....	23



INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**SPECIFICATION FOR THE TESTING OF BALANCED AND  
COAXIAL INFORMATION TECHNOLOGY CABLING –**

**Part 2: Cords as specified in ISO/IEC 11801 and related standards**

FOREWORD

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International Standard IEC 61935-2 has been prepared by IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This third edition cancels and replaces the second edition published in 2005.

This third edition of IEC 61935-2 differs from the second edition in that it covers category 6<sub>A</sub> to category 7<sub>A</sub> cords as defined in ISO/IEC 11801.

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

FDIS	Report on voting
46/351/FDIS	46/364/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.

The French version of this standard has not been voted upon.

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

A list of all parts of the IEC 61935 series, under the general title: *Specification for the testing of balanced and coaxial information technology cabling*, can be found on the IEC website.

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

**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

Balanced cords are constructed for connecting equipment using free connectors according to IEC 60603-7 series, IEC 61076-3-104 and IEC 61076-3-110. It is known that connecting hardware performance is subject to influence by the properties of the free connector termination and therefore balanced cords should be tested to determine the quality of the assembly. Moreover, the performance of balanced cords may differ due to the performances of the involved separate components depending upon the efficiency of the manufacturing procedure. Manufacturing procedures also impact upon the reliability of these balanced cords. Therefore, the primary object of this standard is to provide test methods to ensure compatibility of balanced cords to be used in cabling according to ISO/IEC 11801. Another object is to provide test methods and associated requirements to demonstrate the performance and reliability of these balanced cords during their operational lifetime.

The test methods described in this standard may also be used for any balanced cords that include twisted pairs terminated at each end.

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