
Generic cabling systems - Specification for the testing of balanced communication cabling in accordance with EN 50173 - Part 2: Patch cords and work area cords (IEC 61935-2:2003)

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English version

**Generic cabling systems –
Specification for the testing of balanced communication cabling
in accordance with EN 50173
Part 2: Patch cords and work area cords
(IEC 61935-2:2003)**

Systemes de câblage générique –
Spécification pour les essais de câblage
de télécommunications équilibrées
selon l'EN 50173
Partie 2: Cordons de brassage et
cordons de zone de travail
(CEI 61935-2:2003)

Anwendungsneutrale
Kommunikationskabelanlagen –
Spezifikation für die Prüfung der
symmetrischen Kommunikations-
verkabelung nach EN 50173
Teil 2: Rangierschnüre und
Geräteanschlussschnüre
(IEC 61935-2:2003)

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This European Standard was approved by CENELEC on 2003-07-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

Foreword

The text of document 46A/532/FDIS, future edition 1 of IEC 61935-2, 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 was approved by CENELEC as EN 61935-2 on 2003-07-01.

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 (dop) 2004-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-07-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61935-2:2003 was approved by CENELEC as a European Standard without any modification.

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Corrigendum to EN 61935-2

Title page

Replace "ISO/IEC 11801" and "ISO/CEI 11801" by "EN 50173".

Clause 1, Scope

Replace the first paragraph by:

This part of EN 61935 provides methods to ensure compatibility of modular plug cords to be used in cabling according to EN 50173 and also provides test methods and associated requirements to demonstrate the performance and reliability of these cords during their operational lifetime.

Clause 2, Normative references

Replace the references to IEC 61935-1 and ISO/IEC 11801 by:

EN 61935-1:2000 + corrigendum February 2001, *Generic cabling systems - Specification for the testing of balanced communication cabling in accordance with EN 50173 - Part 1: Installed cabling* (IEC 61935-1:2000, modified)

EN 50173-1:2002, *Information technology - Generic cabling systems - Part 1: General requirements and office areas*

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General

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Replace all other occurrences of "ISO/IEC 11801" by "EN 50173-1".

This replacement is to be made in the introduction (line 8) and in (sub)clauses 4.1 and 7.6 (last line).

Replace all occurrences of "IEC 61935-1" by "EN 61935-1".

This replacement is to be made in (sub)clauses 3, 4.3 (three times), 5.3, 5.4, 5.5, 5.6.3 and 5.7.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
–	–	Information technology - Generic cabling systems - Part 1: General requirements and office areas	EN 50173-1 + corr. January	2002 2003
IEC 60068-2-61	1991	Environmental testing Part 2: Test methods - Test Z/ABDM: Climatic sequence	EN 60068-2-61	1993
IEC 60603-7	- ¹⁾	Connectors for frequencies below 3 MHz for use with printed boards Part 7: Detail specification for connectors, 8-way, including fixed and free connectors with common mating features, with assessed quality	EN 60603-7	1997 ²⁾
IEC 60603-7-4	- ³⁾	Part 7-4: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz	-	-
IEC 61156	Series	Multicore and symmetrical pair/quad cables for digital communications	-	-
IEC 61935-1	2000	Generic cabling systems – Specification for the testing of balanced communication cabling in accordance with EN 50173 Part 1: Installed cabling	EN 61935-1 + corr. February	2000 2001

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

³⁾ At draft stage.

INTERNATIONAL STANDARD

IEC 61935-2

First edition
2003-05

**Generic cabling systems –
Specification for the testing of balanced
communication cabling in accordance
with ISO/IEC 11801 –**

Part 2: Patch cords and work area cords
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Commission Electrotechnique Internationale
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

GENERIC CABLING SYSTEMS –
SPECIFICATION FOR THE TESTING OF BALANCED COMMUNICATION
CABLING IN ACCORDANCE WITH ISO/IEC 11801 –

Part 2: Patch cords and work area cords

FOREWORD

- 1) 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.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61935-2 has been prepared by subcommittee SC 46A:Coaxial cables, of IEC technical committee TC 46: Cables, wires, waveguides, r.f. connectors, r.f. and microwave passive components and accessories.

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

FDIS	Report on voting
46A/532/FDIS	46A/544/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.

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

The committee has decided that the contents of this publication will remain unchanged until 2004. At this date, the publication will be

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

A bilingual edition of this standard may be issued at a later date.

INTRODUCTION

Modular plug cords are constructed for connecting equipment using modular connecting hardware. It is known that connecting hardware performance is subject to influence by the properties of the modular plug termination and therefore modular plug cords should be tested to determine the quality of the assembly. Moreover, the performance of modular plug cords may differ due to the performances of the involved separate components depending upon the efficiency of the manufacturing procedure. Manufacturing procedures also impact on the reliability of these cords. Therefore, the object of this standard is to provide test methods to ensure compatibility of modular plug cords to be used in cabling according to ISO/IEC 11801. Also, it provides test methods and associated requirements to demonstrate the performance and reliability of these cords during their operational lifetime.

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