

**Connectors for electronic equipment - Part 7-41: Detail specification for 8-way, shielded, free and fixed connectors for data transmissions with frequencies up to 500 MHz**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 60603-7-51:2010 sisaldab Euroopa standardi EN 60603-7-51:2010 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 31.05.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 29.01.2010.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 60603-7-51:2010 consists of the English text of the European standard EN 60603-7-51:2010.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 31.05.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 29.01.2010.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 31.220.10

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**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  
(IEC 60603-7-51:2010)**

Connecteurs pour équipements  
électroniques -  
Partie 7-51: Spécification particulière  
pour les fiches et les embases blindées  
à 8 voies pour la transmission de données  
à des fréquences jusqu'à 500 MHz  
(CEI 60603-7-51:2010)

Steckverbinder für elektronische  
Einrichtungen – Teil 7-51:  
Bauartspezifikation für geschirmte freie  
und feste Steckverbinder, 8polig,  
für Datenübertragungen bis 500 MHz  
(IEC 60603-7-51:2010)

This European Standard was approved by CENELEC on 2010-05-01. 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.

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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 48B/2093/FDIS, future edition 1 of IEC 60603-7-51, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60603-7-51 on 2010-05-01.

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) 2011-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-05-01

Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard IEC 60603-7-51:2010 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 60512-2-1         | NOTE Harmonized as EN 60512-2-1.                        |
| IEC 60512-26-100:2008 | NOTE Harmonized as EN 60512-26-100:2008 (not modified). |
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## 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 60512-1-100	-	Connectors for electronic equipment - Tests and measurements - Part 1-100: General - Applicable publications	EN 60512-1-100	-
IEC 60512-25-9	-	Connectors for electronic equipment - Tests and measurements - Part 25-9: Signal integrity tests - Test 25i: Alien crosstalk	EN 60512-25-9	-
IEC 60512-27-100	-	Connectors for electronic equipment - Tests and measurements - Part 27-100: Signal integrity tests up to 500 MHz on IEC 60603-7 series connectors - Tests 27a to 27g	-	-
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 60603-7-1	2009	Connectors for electronic equipment - Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors	EN 60603-7-1	2009
IEC 61156	Series	Multicore and symmetrical pair/quad cables for digital communications	-	-

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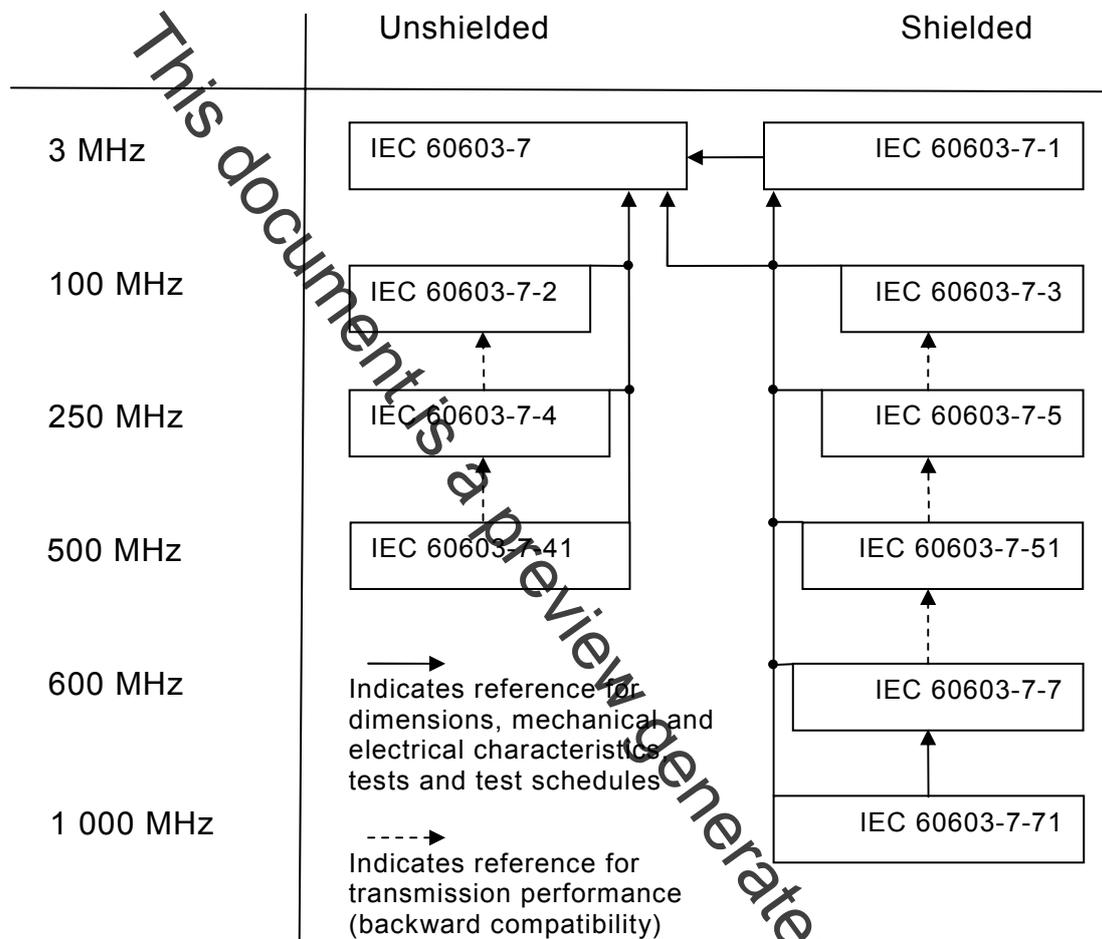
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## INTRODUCTION

IEC 60603-7 is the base specification of the whole series. Subsequent specifications do not duplicate information given in the base document, but list only additional requirements. For complete specification regarding a component of a higher number document all lower numbered documents shall be considered as well. The following diagram shows the interrelation of the documents:



## 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

#### 1 General

##### 1.1 Scope

This part of IEC 60603 covers 8-way, shielded, free and fixed connectors, references dimensional, mechanical, electrical and environmental characteristics and tests in IEC 60603-7, and specifies electrical transmission requirements, including power sum alien (exogenous) crosstalk, for frequencies up to 500 MHz.

These connectors are typically used as category 6<sub>A</sub> connectors in class E<sub>A</sub> cabling systems specified in ISO/IEC 11801.

These connectors are intermateable and interoperable with other IEC 60603-7 series connectors as defined in Clause 2 of IEC 60603-7-1.

These connectors are backward compatible with other IEC 60603-7 series connectors.

NOTE Transmission performance categories: in this IEC standard, the term “category”, when used in reference to transmission performance, refers to those categories defined by ISO/IEC 11801.

##### 1.2 Normative references

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.

IEC 60512-1-100, *Connectors for electronic equipment – Tests and measurements – Part 1-100: General – Applicable publications*

IEC 60512-25-9, *Connectors for electronic equipment – Tests and measurements – Part 25-9: Signal integrity tests – Test 25i: Alien crosstalk*

IEC 60512-27-100<sup>1</sup>, *Connectors for electronic equipment – Tests and measurements – Part 27-100: Signal integrity tests up to 500 MHz on IEC 60603-7 series connectors – Tests 27a to 27g*

EC 60603-7:2008, *Connectors for electronic equipment – Part 7: Detail specification for 8-way, unshielded, free and fixed connectors*

IEC 60603-7-1:2009, *Connectors for electronic equipment – Part 7: Detail specification for 8-way, shielded, free and fixed connectors*

IEC 61156 (all parts), *Multicore and symmetrical pair/quad cables for digital communications*

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<sup>1</sup> To be published.