
Konektorji za električno in elektronsko opremo - Preskusi in meritve - 27-200. del: Dodatne specifikacije za preskuse signalne celovitosti do 2000 MHz na konektorjih serije IEC 60603-7 - Preskusi od 27a do 27g (IEC 60512-27-200:2022)

Connectors for electrical and electronic equipment - Tests and measurements - Part 27-200: Additional specifications for signal integrity tests up to 2 000 MHz on IEC 60603-7 series connectors - Tests 27a to 27g (IEC 60512-27-200:2022)

Steckverbinder für elektrische und elektronische Einrichtungen – Mess- und Prüfverfahren – Teil 27-200: Zusätzliche Festlegungen für Signalintegritätsprüfungen bis 2 000 MHz bei Steckverbindern der Reihe IEC 60603-7 – Prüfungen 27a bis 27g (IEC 60512-27-200:2022)

Connecteurs pour équipements électriques et électroniques - Essais et mesures - Partie 27-200: Spécifications supplémentaires pour les essais d'intégrité des signaux jusqu'à 2 000 MHz sur les connecteurs de la série IEC 60603-7 - Essais 27a à 27g (IEC 60512-27-200:2022)

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(IEC 60512-27-200:2022)

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EN IEC 60512-27-200:2022 (E)**European foreword**

The text of document 48B/2976/FDIS, future edition 1 of IEC 60512-27-200, prepared by SC 48B "Electrical connectors" of IEC/TC 48 "Electrical connectors and mechanical structures for electrical and electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60512-27-200:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2023-07-20 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2025-10-20 document have to be withdrawn

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The text of the International Standard IEC 60512-27-200:2022 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 standard indicated:

IEC 60603-7-7 NOTE Harmonized as EN 60603-7-7

IEC 60603-7-71 NOTE Harmonized as EN 60603-7-71

IEC 60603-7-82 NOTE Harmonized as EN 60603-7-82

IEC 61076-3-110 NOTE Harmonized as EN 61076-3-110

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-581	-	International Electrotechnical Vocabulary - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60512-1	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 1: Generic specification	EN IEC 60512-1	-
IEC 60512-26-100	-	Connectors for electronic equipment - Tests and measurements - Part 26-100: Measurement setup, test and reference arrangements and measurements for connectors according to IEC 60603-7 - Tests 26a to 26g	EN 60512-26-100	-
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	EN 60512-27-100	-
IEC 60512-28-100	-	Connectors for electrical and electronic equipment - Tests and measurements - Part 28-100: Signal integrity tests up to 2 000 MHz - Tests 28a to 28g	EN IEC 60512-28-100	-
IEC 60603-7	-	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	EN IEC 60603-7	-
IEC 60603-7-1	-	Connectors for electronic equipment - Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors	EN 60603-7-1	-
IEC 60603-7-2	-	Connectors for electronic equipment - Part 7-2: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 100 MHz	EN 60603-7-2	-

EN IEC 60512-27-200:2022 (E)

IEC 60603-7-3	-	Connectors for electronic equipment - Part EN 60603-7-3 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 100 MHz	-
IEC 60603-7-4	-	Connectors for electronic equipment - Part EN 60603-7-4 7-4: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz	-
IEC 60603-7-5	-	Connectors for electronic equipment - Part EN 60603-7-5 7-5: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz	-
IEC 60603-7-41	-	Connectors for electronic equipment - Part EN 60603-7-41 7-41: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 500 MHz	-
IEC 60603-7-51	-	Connectors for electronic equipment - Part EN 60603-7-51 7-51: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 500 MHz	-
IEC 60603-7-81	-	Connectors for electronic equipment - Part EN 60603-7-81 7-81: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 2 000 MHz	-
IEC 61156-1	-	Multicore and symmetrical pair/quad cables for digital communications - Part 1: Generic specification	-
IEC 61156-9	-	Multicore and symmetrical pair/quad cables for digital communications - Part 9: Cables for channels with transmission characteristics up to 2 GHz - Sectional specification	-
IEC 61156-10	-	Multicore and symmetrical pair/quad cables for digital communications - Part 10: Cables for cords with transmission characteristics up to 2 GHz - Sectional specification	-
IEC 61935-2	-	Specification for the testing of balanced and coaxial information technology cabling - Part 2: Cords as specified in ISO/IEC 11801-1 and related standards	EN 61935-2 -
IEC 62153-4-12	-	Metallic communication cable test methods - Part 4-12: Electromagnetic compatibility (EMC) - Coupling attenuation or screening attenuation of connecting hardware - Absorbing clamp method	-



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Connecteurs pour équipements électriques et électroniques – Essais et mesures – Partie 27-200: Spécifications supplémentaires pour les essais d'intégrité des signaux jusqu'à 2 000 MHz sur les connecteurs de la série IEC 60603-7 – Essais 27a à 27g

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
TESTS AND MEASUREMENTS –****Part 27-200: Additional specifications for signal integrity tests
up to 2 000 MHz on IEC 60603-7 series connectors –
Tests 27a to 27g**

FOREWORD

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IEC 60512-27-200 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
48B/2976/FDIS	48B/2988/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts of IEC 60512 series, under the general title *Connectors for electrical and electronic equipment – Tests and measurements*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

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INTRODUCTION

This document is primarily intended for use in signal integrity and transmission performance testing up to 2 000 MHz of IEC 60603-7 series 8-way connector type IEC 60603-7-81, according to connector test method IEC 60512-28-100.

This document covers test connectors and associated indirect-reference test fixtures used for connector signal integrity and transmission performance measurements of connector requirements specified in IEC 60603-7 series 8-way connector types defined in these published standards:

IEC 60603-7-2
IEC 60603-7-3
IEC 60603-7-4
IEC 60603-7-5
IEC 60603-7-41
IEC 60603-7-51
IEC 60603-7-81.

This document provides supplementary information on test connectors and test fixtures used in connector performance measurements according to those connectors' respective test methods standards:

IEC 60512-26-100
IEC 60512-27-100
IEC 60512-28-100.

The test fixtures and reference connectors, e.g., test plugs, specified in this document are referenced by test method IEC 60512-28-100.

The test fixtures and reference connectors, e.g., cord test heads, specified in this document are referenced by test method IEC 61935-2.