

SLOVENSKI STANDARD

SIST EN IEC 60512-28-100:2020

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Nadomešča:

SIST EN 60512-28-100:2013

Konektorji za električno in elektronsko opremo - Preskusi in meritve - 28-100. del: Preskusi signalne celovitosti do 2000 MHz - Preskusi od 28a do 28g (IEC 60512-28-100:2019)

Connectors for electrical and electronic equipment - Tests and measurements - Part 28-100: Signal integrity tests up to 2 000 MHz - Tests 28a to 28g (IEC 60512-28-100:2019)

Steckverbinder für elektronische Einrichtungen - Mess- und Prüfverfahren - Teil 28-100: Signalintegritätsprüfungen bis 2 000 MHz an Steckverbindern der Reihen IEC 60603-7 und IEC 61076-3 - Prüfungen 28a bis 28g (IEC 60512-28-100:2019)

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Connecteurs pour équipements électriques et électroniques - Essais et mesures - Partie 28-100 : Essais d'intégrité des signaux jusqu'à 2 000 MHz - Essais 28a à 28g (IEC 60512-28-100:2019)

Ta slovenski standard je istoveten z: EN IEC 60512-28-100:2019

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| 31.220.10 | Vtiči in vtičnice, konektorji | Plug-and-socket devices. Connectors |
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60512-28-100

December 2019

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Supersedes EN 60512-28-100:2013 and all of its amendments and corrigenda (if any)

English Version

**Connectors for electrical and electronic equipment - Tests and measurements - Part 28-100: Signal integrity tests up to 2 000 MHz - Tests 28a to 28g
(IEC 60512-28-100:2019)**

Connecteurs pour équipements électriques et électroniques
- Essais et mesures - Partie 28-100: Essais d'intégrité des signaux jusqu'à 2 000 MHz - Essais 28a à 28g
(IEC 60512-28-100:2019)

Steckverbinder für elektronische Einrichtungen - Mess- und Prüfverfahren - Teil 28-100: Signalintegritätsprüfungen bis 2 000 MHz - Prüfungen 28a bis 28g
(IEC 60512-28-100:2019)

This European Standard was approved by CENELEC on 2019-12-19. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60512-28-100:2019 (E)**European foreword**

The text of document 48B/2756/FDIS, future edition 2 of IEC 60512-28-100, 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 60512-28-100:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-09-19
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-12-19

This document supersedes EN 60512-28-100:2013 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 60512-28-100:2019 was approved by CENELEC as a European Standard without any modification.

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 60169-15 | - | Radio-frequency connectors. Part 15: R.F. coaxial connectors with inner diameter of outer conductor 4.13 mm (0.163 in) with screw coupling - Characteristic impedance 50 ohms (Type SMA) | - | - |
| IEC 60512-1 | - | Connectors for 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 60603-7 series connectors - Tests 27a to 27g | EN 60512-27-100 | - |
| IEC 60512-27-200 | - | Connecteurs 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 60512-29-100 | - | Connectors for electronic equipment - Tests and measurements - Part 29-100: Signal integrity tests up to 500 MHz on M12 style connectors - Tests 29a to 29g | EN 60512-29-100 | - |

EN IEC 60512-28-100:2019 (E)

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|--------------|-------------|
| IEC 60603-7 | - | Connectors for electronic equipment - Part EN 60603-7 7: Detail specification for 8-way, unshielded, free and fixed connectors | | - |
| IEC 60603-7-1 | - | Connectors for electronic equipment - Part EN 60603-7-1 7-1: Detail specification for 8-way, shielded, free and fixed connectors | | - |
| IEC 60603-7-2 | - | Connectors for electronic equipment - Part EN 60603-7-2 7-2: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 100 MHz | | - |
| 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 60603-7-7 | - | Connectors for electronic equipment - Part EN 60603-7-7 7-7: Detail specification for 8-way, shielded, free and fixed connectors for data transmission with frequencies up to 600 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 60603-7-71 | - | Connectors for electronic equipment - Part EN 60603-7-71 7-71: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 1 000 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 | | - |

EN IEC 60512-28-100:2019 (E)

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|----------------|-------------|
| IEC 60603-7-82 | - | Connectors for electronic equipment - Part 7-82: Detail specification for 8-way, 12 contacts, shielded, free and fixed connectors, for data transmission with frequencies up to 2 000 MHz | EN 60603-7-82 | - |
| IEC 61076-1 | - | Connectors for electronic equipment - Product requirements - Part 1: Generic specification | EN 61076-1 | - |
| IEC 61076-2 | - | Connectors for electronic equipment - Product requirements - Part 2: Sectional specification for circular connectors | EN 61076-2 | - |
| IEC 61076-2-109 | - | Connectors for electronic equipment - Product requirements - Part 2-109: Circular connectors - Detail specification for connectors with M 12 x 1 screw-locking, for data transmission frequencies up to 500 MHz | EN 61076-2-109 | - |
| IEC 61076-3 | - | Connectors for electronic equipment - Product requirements - Part 3: Rectangular connectors - Sectional specification | EN 61076-3 | - |
| IEC 61076-3-104 | - | Connectors for electrical and electronic equipment - Product requirements - Part 3-104: Detail specification for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 2 000 MHz | EN 61076-3-104 | - |
| IEC 61076-3-110 | - | Connectors for electronic equipment - Product requirements - Part 3-110: Detail specification for free and fixed connectors for data transmission with frequencies up to 3 000 MHz | EN 61076-3-110 | - |
| 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 | 2016 | Multicore and symmetrical pair/quad - cables for digital communications - Part 10: Cables for cords with transmission characteristics up to 2 GHz - Sectional specification | | - |
| IEC 61169-16 | - | Radio-frequency connectors - Part 16: Sectional specification - RF coaxial connectors with inner diameter of outer conductor 7 mm (0,276 in) with screw coupling - Characteristics impedance 50 ohms (75 ohms) (type N) | EN 61169-16 | - |

EN IEC 60512-28-100:2019 (E)

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|--------------|-------------|
| 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 | | - |
| ISO/IEC 11801-1 | 2017 | Information technology - Generic cabling - for customer premises - Part 1: General requirements | | - |

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Connectors for electrical and electronic equipment –
Tests and measurements –
Part 28-100: Signal integrity tests up to 2 000 MHz – Tests 28a to 28g**

**Connecteurs pour équipements électriques et électroniques –
Essais et mesures –
Partie 28-100: Essais d'intégrité des signaux jusqu'à 2 000 MHz – Essais
28a à 28g**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT –
TESTS AND MEASUREMENTS –****Part 28-100: Signal integrity tests up to 2 000 MHz –
Tests 28a to 28g**

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 60512-28-100 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment.

This second edition cancels and replaces the first edition, issued in 2013, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- The title is revised from 1 000 MHz to 2 000 MHz to reflect the range of frequencies which may be tested.
- All tables and requirements have been revised up to 2 000 MHz.

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

| FDIS | Report on voting |
|---------------|------------------|
| 48B/2756/FDIS | 48B/2766/RVD |

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

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

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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 "<http://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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