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**Konektorji za elektronsko opremo - Preskusi in meritve - 21-1. del: Preskusi  
odpornosti proti radijskim frekvencam - Preskus 21a: Odpornost proti vzporedni  
radijski frekvenci (IEC 60512-21-1:2010)**

Connectors for electronic equipment - Tests and measurements - Part 21-1: R.F.  
resistance tests - Test 21a: R.F. shunt resistance (IEC 60512-21-1:2010)

Steckverbinder für elektronische Einrichtungen - Mess- und Prüfverfahren - Teil 21-1:  
Prüfungen der HF-Güte - Prüfung 21a: HF-Dämpfungswiderstand (IEC 60512-21-  
1:2010)

Connecteurs pour équipements électroniques - Essais et mesures - Partie 21-1: Essais  
de résistance aux fréquences radioélectriques - Essai 21a: Résistance parallèle aux  
fréquences radioélectriques (CEI 60512-21-1:2010)

**Ta slovenski standard je istoveten z: EN 60512-21-1:2010**

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**ICS:**

31.220.10 Vtiči in vtičnice, konektorji Plug-and-socket devices.  
Connectors

**SIST EN 60512-21-1:2010****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60512-21-1**

July 2010

ICS 31.220.01

English version

**Connectors for electronic equipment -  
Tests and measurements -  
Part 21-1: R.F. resistance tests -  
Test 21a: R.F. shunt resistance  
(IEC 60512-21-1:2010)**

Connecteurs pour équipements  
électroniques -  
Essais et mesures -  
Partie 21-1: Essais de résistance  
aux fréquences radioélectriques -  
Essai 21a: Résistance parallèle  
aux fréquences radioélectriques  
(CEI 60512-21-1:2010)

Steckverbinder für elektronische  
Einrichtungen -  
Mess- und Prüfverfahren -  
Teil 21-1: Prüfungen der HF-Güte -  
Prüfung 21a: HF-Dämpfungswiderstand  
(IEC 60512-21-1:2010)

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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 48B/2151/FDIS, future edition 1 of IEC 60512-21-1, 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 60512-21-1 on 2010-07-01.

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) 2011-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-07-01

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## Endorsement notice

The text of the International Standard IEC 60512-21-1:2010 was approved by CENELEC as a European Standard without any modification.

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IEC 60512-21-1

Edition 1.0 2010-06

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Connectors for electronic equipment – Tests and measurements –  
Part 21-1: RF resistance tests – Test 21a: RF shunt resistance**

**Connecteurs pour équipements électroniques – Essais et mesures –  
Partie 21-1: Essais de résistance aux fréquences radioélectriques – Essai 21a:  
Résistance parallèle aux fréquences radioélectriques**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRONIC EQUIPMENT –  
TESTS AND MEASUREMENTS –****Part 21-1: RF resistance tests –  
Test 21a: RF shunt resistance**

## FOREWORD

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International Standard IEC 60512-21-1 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This standard cancels and replaces Test 21a of IEC 60512-9, issued in 1992. The structure of the IEC 60512 series is explained in IEC 60512-1-100.

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

FDIS	Report on voting
48B/2151/FDIS	48B/2186/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.

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

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

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## CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

### Part 21-1: RF resistance tests – Test 21a: RF shunt resistance

#### 1 Scope and object

This part of IEC 60512, when required by the detail specification, is used for testing connectors within the scope of technical committee 48. It may also be used for similar devices when specified in a detail specification.

The object of this standard is to detail a standard test method to determine the value of RF shunt resistance which degrades the quality factor of an L/C circuit when a connector is connected in parallel. This value is expressed in terms of a parallel damping resistance.

#### 2 Preparation of the specimen

The specimen shall be prepared and mounted according to the detail specification.

#### 3 Test method

The R.F. shunt resistance shall be measured with suitable measuring equipment. The measuring points shall be specified in the detail specification. The measuring error shall not exceed  $\pm 10\%$ .

The test frequency shall be specified in the detail specification. The preferred frequencies are: 1 MHz, 10 MHz, 30 MHz and 100 MHz.

#### 4 Requirements

The value of RF shunt resistance shall be not less than the value specified in the detail specification.

#### 5 Details to be specified

When this test is required by the detail specification, the following details shall be specified:

- a) preparation and mounting of the specimen;
  - b) measuring points;
  - c) measuring frequency;
  - d) minimum value of RF shunt resistance;
  - e) any deviation from the standard test method.
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