



# SLOVENSKI STANDARD SIST EN 61000-4-4:2005

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Electromagnetic compatibility (EMC) -- Part 4-4: Testing and measurement techniques -  
Electrical fast transient/burst immunity test

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Elektromagnetische Verträglichkeit (EMV) -- Teil 4-4: Prüf- und Messverfahren - Prüfung  
der Störfestigkeit gegen schnelle transiente elektrische Störgrößen/Burst

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Compatibilité électromagnétique (CEM) -- Partie 4-4: Techniques d'essai et de mesure -  
Essais d'immunité aux transitoires électriques rapides en salves

**Ta slovenski standard je istoveten z: EN 61000-4-4:2004**

**ICS:**

33.100.20      Imunost      Immunity

**SIST EN 61000-4-4:2005      en**

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EUROPEAN STANDARD

**EN 61000-4-4**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2004

ICS 33.100.20

Supersedes EN 61000-4-4:1995 + A1:2001 + A2:2001

English version

**Electromagnetic compatibility (EMC)  
Part 4-4: Testing and measurement techniques -  
Electrical fast transient/burst immunity test  
(IEC 61000-4-4:2004)**

Compatibilité électromagnétique (CEM)  
Partie 4-4: Techniques d'essai  
et de mesure -  
Essais d'immunité aux transitoires  
électriques rapides en salves  
(CEI 61000-4-4:2004)

Elektromagnetische Verträglichkeit (EMV)  
Teil 4-4: Prüf- und Messverfahren -  
Prüfung der Störfestigkeit gegen schnelle  
transiente elektrische Störgrößen/Burst  
(IEC 61000-4-4:2004)

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This European Standard was approved by CENELEC on 2004-10-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 77B/419/FDIS, future edition 2 of IEC 61000-4-4, prepared by SC 77B, High frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61000-4-4 on 2004-10-01.

This European Standard supersedes EN 61000-4-4:1995 + A1:2001 + A2:2001.

This new edition improves and clarifies simulator specifications, test criteria and test set-ups. Only common mode injection is required.

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) 2005-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-10-01

Annex ZA has been added by CENELEC.

## iTeh STANDARD PREVIEW (standards.iTech.ai) Endorsement notice

The text of the International Standard IEC 61000-4-4:2004 was approved by CENELEC as a European Standard without any modification.  
<http://standards.sist/650408af-394d-4fb3-8ed2-575171488cee/sist-en-61000-4-4-2005>

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61000-4-4 NOTE Harmonized as EN 61000-4-4:1995 (not modified).

## 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 Where 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 60050-161	1990	International Electrotechnical Vocabulary (IEV) Chapter 161: Electromagnetic compatibility	-	-

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# INTERNATIONAL STANDARD

# IEC 61000-4-4

Second edition  
2004-07

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BASIC EMC PUBLICATION

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**Electromagnetic compatibility (EMC) –**

**Part 4-4:  
Testing and measurement techniques –  
Electrical fast transient/burst immunity test**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMAGNETIC COMPATIBILITY (EMC) –****Part 4-4: Testing and measurement techniques –  
Electrical fast transient/burst immunity test**

## 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 61000-4-4 has been prepared by sub-committee 77B: High frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

It forms Part 4-4 of IEC 61000. It has the status of a basic EMC publication in accordance with IEC Guide 107, *Electromagnetic compatibility – Guide to the drafting of electromagnetic compatibility publications*.

This second edition cancels and replaces the first edition published in 1995 and its amendments 1 (2000) and 2 (2001) and constitutes a technical revision.

This second edition improves and clarifies simulator specifications, test criteria and test set-ups. Only common mode injection is required.

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

FDIS	Report on voting
77B/419/FDIS	77B/424/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 the maintenance result 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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## INTRODUCTION

IEC 61000 is published in separate parts, according to the following structure:

### **Part 1: General**

General considerations (introduction, fundamental principles)

Definitions, terminology

### **Part 2: Environment**

Description of the environment

Classification of the environment

Compatibility levels

### **Part 3: Limits**

Emission limits

Immunity limits (in so far as they do not fall under the responsibility of the product committees)

### **Part 4: Testing and measurement techniques**

Measurement techniques

Testing techniques

### **Part 5: Installation and mitigation guidelines**

Installation guidelines

Mitigation methods and devices

### **Part 6: Generic standards**

### **Part 9: Miscellaneous**

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Each part is further subdivided into several parts, published either as international standards or as technical specifications or technical reports, some of which have already been published as sections. Others will be published with the part number followed by a dash and a second number identifying the subdivision (example: 61000-6-1).

This part is an international standard which gives immunity requirements and test procedures related to electrical fast transients/bursts.