

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electrical equipment for measurement, control and laboratory use – EMC
requirements –
Part 1: General requirements**

**Matériel électrique de mesure, de commande et de laboratoire – Exigences
relatives à la CEM –
Partie 1: Exigences générales**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL EQUIPMENT FOR MEASUREMENT,
CONTROL AND LABORATORY USE –
EMC REQUIREMENTS –****Part 1: General requirements**

FOREWORD

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International Standard IEC 61326-1 has been prepared by subcommittee 65A: System aspects, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition, published in 2005. This edition constitutes a technical revision.

The significant technical changes with respect to the previous edition are as follows:

- the immunity test levels and performance criteria have been reviewed;
- requirements for portable test and measurement equipment have been clarified and amended;
- the description of the electromagnetic environments has been improved.

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

FDIS	Report on voting
65A/628/FDIS	65A/637/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 61326 series under the general title *Electrical equipment for measurement, control and laboratory use – EMC requirements*, 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- withdrawn,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.

Withdrawn

INTRODUCTION

Instruments and equipment within the scope of this standard may often be geographically widespread and hence operate under a wide range of environmental conditions.

The limitation of undesired electromagnetic emissions ensures that no other equipment, installed nearby, is unduly influenced by the equipment under consideration. The limits are more or less specified by, and therefore taken from, IEC and International Special Committee on Radio Interference (CISPR) publications.

However, the equipment should function without undue degradation in an electromagnetic environment typical for the locations where it is intended to be operated. In this respect the standard specifies three different types of electromagnetic environment and the levels for immunity. More detailed information about issues related to electromagnetic environments are given in IEC 61000-2-5. Special risks, involving for example nearby or direct lightning strikes, circuit-breaking, or exceptionally high electromagnetic radiation in close proximity, are not covered.

Complex electric and/or electronic systems should require EMC planning in all phases of their design and installation, taking into consideration the electromagnetic environment, any special requirements, and the severity of failures.

This part of IEC 61326 specifies the EMC requirements that are generally applicable to all equipment within its scope. For certain types of equipment, these requirements will be supplemented or modified by the special requirements of one, or more than one, particular part within IEC 61326-2 series. These should be read in conjunction with the IEC 61326-1 requirements.

Withhold