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REDLINE VERSION

# INTERNATIONAL STANDARD



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**Electrical equipment for measurement, control and laboratory use –  
EMC requirements –  
Part 2-1: Particular requirements – Test configurations, operational conditions  
and performance criteria for sensitive test and measurement equipment for  
EMC unprotected applications**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## CONTENTS

FOREWORD .....	3
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 General .....	5
5 EMC test plan .....	6
5.1 General .....	6
5.2 Configuration of EUT during testing .....	6
5.3 Operation conditions of EUT during testing .....	6
5.4 Specification of FUNCTIONAL PERFORMANCE .....	7
5.5 Test description .....	7
6 Immunity requirements .....	7
6.1 Conditions during the tests .....	7
6.2 Immunity test requirements .....	7
6.3 Random aspects .....	7
6.4 Performance criteria .....	7
7 Emission requirements .....	7
8 Test results and test report .....	7
9 Instructions for use .....	8
Annex A (normative) Immunity test requirements for PORTABLE TEST AND MEASUREMENT EQUIPMENT powered by battery or from the circuit being measured .....	9
Annex B (informative) Guide for analysis and assessment for electromagnetic compatibility .....	10

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**ELECTRICAL EQUIPMENT FOR MEASUREMENT,  
CONTROL AND LABORATORY USE –  
EMC REQUIREMENTS –****Part 2-1: Particular requirements –  
Test configurations, operational conditions and performance  
criteria for sensitive test and measurement equipment  
for EMC unprotected applications**

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- 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 61326-2-1 has been prepared by subcommittee 65A: System aspects, of IEC technical committee 65: Industrial-process measurement, control and automation.

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

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

- update with respect to IEC 61326-1:2020.

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

FDIS	Report on voting
65A/976/FDIS	65A/987/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.

This part of IEC 61326 is to be used in conjunction with IEC 61326-1:2020 and follows the same numbering of clauses, subclauses, tables and figures.

When a particular subclause of IEC 61326-1 is not mentioned in this part, that subclause applies as far as is reasonable. When this standard states “addition”, “modification” or “replacement”, the relevant text in IEC 61326-1 is to be adapted accordingly.

NOTE The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in IEC 61326-1;
- unless notes are in a new subclause or involve notes in IEC 61326-1, they are numbered starting from 101 including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

A list of all parts of IEC 61326 series, under the general title *Electrical equipment for measurement, control and laboratory use – EMC requirements*, can be found on the IEC website.

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- replaced by a revised edition, or
- amended.

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# ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE – EMC REQUIREMENTS –

## Part 2-1: Particular requirements – Test configurations, operational conditions and performance criteria for sensitive test and measurement equipment for EMC unprotected applications

### 1 Scope

In addition to the scope of IEC 61326-1, this part of IEC 61326 specifies more detailed test configurations, operational conditions and performance criteria for equipment with test and measurement circuits (~~both~~ internal ~~and~~/or, external to the equipment, ~~or both~~) that are not EMC protected for operational and/or functional reasons, as specified by the manufacturer.

The manufacturer specifies the environment for which the product is intended to be used and selects the appropriate test level specifications of IEC 61326-1:2020.

NOTE Examples of equipment include, but are not limited to, oscilloscopes, logic analysers, spectrum analysers, network analysers, analogue instruments, digital multimeters (DMM) and board test systems.

### 2 Normative references

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.

Clause 2 of IEC 61326-1:2020 applies except as follows:

*Addition:*

IEC 61326-1:~~2012~~2020, *Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements*

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Electrical equipment for measurement, control and laboratory use –  
EMC requirements –  
Part 2-1: Particular requirements – Test configurations, operational conditions  
and performance criteria for sensitive test and measurement equipment for  
EMC unprotected applications**

**Matériel électrique de mesure, de commande et de laboratoire –  
Exigences relatives à la CEM –  
Partie 2-1: Exigences particulières – Configurations d'essai, conditions  
fonctionnelles et critères de performance pour essai de sensibilité et matériel de  
mesure pour les applications non protégées de la CEM**

## CONTENTS

FOREWORD .....	3
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 General .....	5
5 EMC test plan .....	6
5.1 General .....	6
5.2 Configuration of EUT during testing .....	6
5.3 Operation conditions of EUT during testing .....	6
5.4 Specification of FUNCTIONAL PERFORMANCE .....	7
5.5 Test description .....	7
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6.2 Immunity test requirements .....	7
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8 Test results and test report .....	7
9 Instructions for use .....	8
Annex A (normative) Immunity test requirements for PORTABLE TEST AND MEASUREMENT EQUIPMENT powered by battery or from the circuit being measured .....	9
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**ELECTRICAL EQUIPMENT FOR MEASUREMENT,  
CONTROL AND LABORATORY USE –  
EMC REQUIREMENTS –****Part 2-1: Particular requirements –  
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# **ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE – EMC REQUIREMENTS –**

## **Part 2-1: Particular requirements – Test configurations, operational conditions and performance criteria for sensitive test and measurement equipment for EMC unprotected applications**

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*Addition:*

IEC 61326-1:2020, *Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements*

## SOMMAIRE

AVANT-PROPOS .....	13
1 Domaine d'application .....	15
2 Références normatives .....	15
3 Termes et définitions .....	15
4 Généralités .....	15
5 Plan d'essai de CEM .....	16
5.1 Généralités .....	16
5.2 Configuration de l'EST lors des essais .....	16
5.3 Conditions de fonctionnement de l'EST lors des essais.....	16
5.4 Spécification des PERFORMANCES FONCTIONNELLES .....	17
5.5 Description de l'essai.....	17
6 Exigences relatives à l'immunité .....	17
6.1 Conditions lors des essais .....	17
6.2 Exigences pour les essais d'immunité.....	17
6.3 Aspects aléatoires .....	17
6.4 Critères de performance .....	17
7 Exigences relatives à l'émission .....	18
8 Résultats d'essai et rapport d'essai .....	18
9 Instructions pour l'utilisation .....	18
Annexe A (normative) Exigences concernant les essais d'immunité pour le MATÉRIEL D'ESSAI ET DE MESURE PORTABLE alimenté par batterie ou par le circuit mesuré.....	19
Annexe B (informative) Guide destiné à l'analyse et à l'évaluation de la compatibilité électromagnétique .....	20

## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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### **MATÉRIEL ÉLECTRIQUE DE MESURE, DE COMMANDE ET DE LABORATOIRE – EXIGENCES RELATIVES À LA CEM –**

#### **Partie 2-1: Exigences particulières – Configurations d'essai, conditions fonctionnelles et critères de performance pour essai de sensibilité et matériel de mesure pour les applications non protégées de la CEM**

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La Norme internationale IEC 61326-2-1 a été établie par le sous-comité 65A: Aspects systèmes, du comité d'études 65 de l'IEC: Mesure, commande et automation dans les processus industriels.

Cette troisième édition annule et remplace la deuxième édition parue en 2012. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à la version précédente:

- Mise à jour par rapport à l'IEC 61326-1:2020.

Le texte de cette Norme internationale est issu des documents suivants:

FDIS	Rapport de vote
65A/976/FDIS	65A/987/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

La présente partie de l'IEC 61326 doit être utilisée conjointement avec l'IEC 61326-1:2020 et suit la même numérotation des articles, paragraphes, tableaux et figures.

Lorsqu'un paragraphe particulier de l'IEC 61326-1 n'est pas mentionné dans la présente partie, ce paragraphe s'applique pour autant qu'il soit raisonnable. Lorsque la présente norme spécifie "addition", "modification" ou "remplacement", le texte correspondant de l'IEC 61326-1 doit être adapté en conséquence.

NOTE Le système de numérotation suivant est utilisé:

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- les annexes supplémentaires sont appelées AA, BB, etc.

Une liste de toutes les parties de la série IEC 61326, publiées sous le titre général *Matériel électrique de mesure, de commande et de laboratoire – Exigences relatives à la CEM*, peut être consultée sur le site web de l'IEC.

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- amendé.

# MATÉRIEL ÉLECTRIQUE DE MESURE, DE COMMANDE ET DE LABORATOIRE – EXIGENCES RELATIVES À LA CEM –

## Partie 2-1: Exigences particulières – Configurations d'essai, conditions fonctionnelles et critères de performance pour essai de sensibilité et matériel de mesure pour les applications non protégées de la CEM

### 1 Domaine d'application

En complément au domaine d'application de l'IEC 61326-1, la présente partie de l'IEC 61326 donne des spécifications plus détaillées des configurations d'essai, des conditions fonctionnelles et des critères de performance pour les matériels avec des circuits d'essai et de mesure (internes et/ou externes au matériel) qui n'ont pas de protection CEM pour des raisons opérationnelles et/ou fonctionnelles, comme spécifié par le fabricant.

Le fabricant spécifie l'environnement auquel le produit est destiné et sélectionne les spécifications pertinentes du niveau d'essai de l'IEC 61326-1:2020.

NOTE Exemples de matériels (entre autres): oscilloscopes, analyseurs logiques, analyseurs de spectres, analyseurs de réseaux, appareils de mesure analogiques, multimètres numériques (DMM) et systèmes d'essai de carte.

### 2 Références normatives

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

L'Article 2 de l'IEC 61326-1:2020 s'applique avec l'exception suivante:

*Addition:*

IEC 61326-1:2020, *Matériel électrique de mesure, de commande et de laboratoire – Exigences relatives à la CEM – Partie 1: Exigences générales*