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REDLINE VERSION

Elektrisk utrustning för mätning, styrning och för laboratorieändamål – EMC-fordringar – Del 2-1: Särskilda fordringar – Provningssuppställningar, driftförhållanden och prestandavillkor för känslig utrustning för mätning och provning där särskilt EMC-skydd saknas

*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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IEC 61326-2-1

Edition 3.0 2020-10
REDLINE VERSION

INTERNATIONAL STANDARD



**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

ICS 17.220.20; 25.040.40; 33.100.20

ISBN 978-2-8322-8989-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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**

FOREWORD

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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

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.

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
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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*

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Elektrisk utrustning för mätning, styrning och för laboratorieändamål – EMC-fordringar – Del 2-1: Särskilda fordringar – Provningssuppställningar, driftförhållanden och prestandavillkor för känslig utrustning för mätning och provning där särskilt EMC-skydd saknas

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

Som svensk standard gäller europastandarden EN IEC 61326-2-1:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61326-2-1:2021.

Nationellt förord

Europastandarden EN IEC 61326-2-1:2021

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61326-2-1, Third edition, 2020 - 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**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN IEC 61326-1, utgåva 4, 2021.

Tidigare fastställd svensk standard SS-EN 61326-2-1, utgåva 2, 2013, gäller ej fr o 2024-06-04.

ICS 33.100.20; 25.040.40; 17.220.20

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English Version

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
(IEC 61326-2-1:2020)

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
(IEC 61326-2-1:2020)

Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-1: Besondere Anforderungen - Prüfanordnung, Betriebsbedingungen und Leistungsmerkmale für empfindliche Prüf- und Messgeräte für Anwendungen ohne EMV-Schutzmaßnahmen
(IEC 61326-2-1:2020)

This European Standard was approved by CENELEC on 2020-11-27. 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.

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 CEN-CENELEC Management Centre has the same status as the official versions.

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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

European foreword

The text of document 65A/976/FDIS, future edition 3 of IEC 61326-2-1, prepared by SC 65A "System aspects" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61326-2-1:2021.

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) 2021-12-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-06-04

This document supersedes EN 61326-2-1:2013 and all of its amendments and corrigenda (if any).

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This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Endorsement notice

The text of the International Standard IEC 61326-2-1:2020 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.

The Annex ZA of EN IEC 61326-1:2021 applies with the following additions:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61326-1	2020	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements	EN IEC 61326-1	2021

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**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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Exigences relatives à la CEM –
Partie 2-1: Exigences particulières – Configurations d'essai, conditions
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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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 (internal 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.

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Addition:

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