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Passiva radiofrekvens- och mikrovågskomponenter – Mätning av intermodulationsnivån – Del 1: Allmänna fordringar och mätmetoder

*Passive RF and microwave devices, intermodulation level measurement –
Part 1: General requirements and measuring methods*

Som svensk standard gäller europastandarden EN IEC 62037-1:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62037-1:2021.

Nationellt förord

Europastandarden EN IEC 62037-1:2021

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62037-1, Second edition, 2021 - Passive RF and microwave devices, intermodulation level measurement - Part 1: General requirements and measuring methods**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62037-1, utgåva 1, 2013, gäller ej fr o m 2024-12-23.

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English Version

Passive RF and microwave devices, intermodulation level
measurement - Part 1: General requirements and measuring
methods
(IEC 62037-1:2021)

Dispositifs RF et à micro-ondes passifs, mesure du niveau
d'intermodulation - Partie 1: Exigences générales et
méthodes de mesure
(IEC 62037-1:2021)

Passive HF- und Mikrowellenbauteile, Messung des
Intermodulationspegels - Teil 1: Allgemeine Anforderungen
und Messverfahren
(IEC 62037-1:2021)

This European Standard was approved by CENELEC on 2021-12-23. 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 46/834/FDIS, future edition 2 of IEC 62037-1, prepared by IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62037-1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-09-23 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-12-23 document have to be withdrawn

This document supersedes EN 62037-1:2012 and all of its amendments and corrigenda (if any).

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 62037-1:2021 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62037	series	Passive RF and microwave devices, EN IEC 62037 intermodulation level measurement		series

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Passive RF and microwave devices, intermodulation level measurement –
Part 1: General requirements and measuring methods**

**Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation –
Partie 1: Exigences générales et méthodes de mesure**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
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INTERNATIONALE

ICS 33.040.20

ISBN 978-2-8322-1050-8

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PASSIVE RF AND MICROWAVE DEVICES,
INTERMODULATION LEVEL MEASUREMENT –****Part 1: General requirements and measuring methods****FOREWORD**

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IEC 62037-1 has been prepared by IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

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

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

- a) clarification added that test equipment may utilize pulsed generators to reduce power consumption;
- b) heating effect differences in the device under test noted in Annex B for tests conducted using pulsed generators;
- c) guidance added in Annex B to improve probability of detection of short duration PIM events while dynamic testing.

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

Draft	Report on voting
46/834/FDIS	46/855/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This International Standard is to be used in conjunction with IEC 62037 (all parts).

A list of all the parts in the IEC 62037 series, published under the general title *Passive RF and microwave devices, intermodulation level measurement*, 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 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
- amended.

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PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

Part 1: General requirements and measuring methods

1 Scope

This part of IEC 62037 deals with the general requirements and measuring methods for intermodulation (IM) level measurement of passive RF and microwave components, which can be caused by the presence of two or more transmitting signals.

The test procedures given in this document give the general requirements and measurement methods required to characterize the level of unwanted IM signals using two transmitting signals.

The IEC 62037 series addresses the measurement of PIM, but does not cover the long-term reliability of a product with reference to its performance.

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.

IEC 62037 (all parts), *Passive RF and microwave devices, intermodulation level measurement*