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REDLINE VERSION

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*

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REDLINE VERSION

INTERNATIONAL STANDARD



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

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.040.20

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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.

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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.

~~This standard is to be used in conjunction with other appropriate part(s) of IEC 62037.~~

2 Normative references

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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*

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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)

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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:

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- latest date by which the national standards conflicting with the (dow) 2024-12-23 document have to be withdrawn

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Annex ZA (normative)

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



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INTERNATIONAL STANDARD

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**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**

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PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

Part 1: General requirements and measuring methods

1 Scope

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