

Irish Standard I.S. EN 62037-3:2012

Passive RF and microwave devices, intermodulation level measurement -- Part 3: Measurement of passive intermodulation in coaxial connectors (IEC 62037-3:2012 (EQV))

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**EUROPEAN STANDARD** 

EN 62037-3

NORME EUROPÉENNE EUROPÄISCHE NORM

September 2012

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Supersedes EN 62037:1999 (partially)

English version

# Passive RF and microwave devices, intermodulation level measurement - Part 3: Measurement of passive intermodulation in coaxial connectors (IEC 62037-3:2012)

Dispositifs RF et à micro-ondes passifs, mesure du niveau d'intermodulation - Partie 3: Mesure de l'intermodulation passive dans les connecteurs coaxiaux (CEI 62037-3:2012)

Passive HF- und Mikrowellenbauteile, Messung des Intermodulationspegels -Teil 3: Messung der passiven Intermodulation in koaxialen Steckverbindern (IEC 62037-3:2012)

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

EN 62037-3:2012

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#### **Foreword**

The text of document 46/417/FDIS, future edition 1 of IEC 62037-3, prepared by IEC TC 46 "Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62037-3:2012.

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)	2013-05-28
•	latest date by which the national standards conflicting with the	(dow)	2015-08-28

This document supersedes EN 62037:1999 (PART).

document have to be withdrawn

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#### **Endorsement notice**

The text of the International Standard IEC 62037-3:2012 was approved by CENELEC as a European Standard without any modification.

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EN 62037-3:2012

## Annex ZA (normative)

## Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 62037-1	-	Passive RF and microwave devices, intermodulation level measurement - Part 1: General requirements and measuring methods	EN 62037-1	-
IEC 62037-4	-	Passive RF and microwave devices, intermodulation level measurement - Part 4: Measurement of passive intermodulation in coaxial cables	EN 62037-4	-

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

#### Part 3: Measurement of passive intermodulation in coaxial connectors

#### **FOREWORD**

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International Standard IEC 62037-3 has been prepared by technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

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

FDIS	Report on voting	
46/417/FDIS	46/433/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.

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A list of all the parts in the IEC 62037 series, published under the general title *Passive r.f.* and microwave devices, intermodulation level measurement 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
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#### PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT -

#### Part 3: Measurement of passive intermodulation in coaxial connectors

#### 1 Scope

This part of IEC 62037 defines the impact test on coaxial connectors to evaluate their robustness against weak connections and particles inside the connector as independently as possible from the effects of cable PIM (passive intermodulation).

For other connectors (e.g. panel mounted connectors), the cable can be replaced by an adequate transmission-line (e.g. airline, stripline). In order to evaluate the effects of mechanical stresses on the connectors, a series of impacts is applied to the connectors while measuring the PIM.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62037-1, Passive r.f. and microwave devices, intermodulation level measurement – Part 1: General requirements and measuring methods<sup>1</sup>

IEC 62037-4, Passive r.f. and microwave devices, intermodulation level measurement – Part 4: Measurement of passive intermodulation in coaxial cables<sup>2</sup>

#### 3 Abbreviations

DUT Device under test

IM Intermodulation

PIM Passive intermodulation

#### 4 Test method

#### 4.1 Samples for testing

One of two setups may be used.

NOTE Correct assembly methods and techniques are critical to the proper operation of the connector on the cable.

<sup>1</sup> To be published.

<sup>2</sup> To be published.



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