

INTERNATIONAL STANDARD



**Passive RF and microwave devices, intermodulation level measurement –
Part 3: Measurement of passive intermodulation in coaxial connectors**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PASSIVE RF AND MICROWAVE DEVICES, INTERMODULATION LEVEL MEASUREMENT –

Part 3: Measurement of passive intermodulation in coaxial connectors

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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.

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

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- withdrawn,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*¹

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

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.

¹ To be published.

² To be published.