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Passive RF and microwave devices, intermodulation level measurement - Part 2: Measurement of passive intermodulation in coaxial cable assemblies

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 62037-2 edition 2.1 contains the second edition (2021-11) [documents 46/835/FDIS and 46/856/RVD] and its amendment 1 (2025-12) [documents 46/1028/CDV and 46/1054/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

IEC 62037-2 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) criteria for application of mechanical stress revised to be a function of advertised cable bend radius.

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

Draft	Report on voting
46/835/FDIS	46/856/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.

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 and its amendment 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, or
– revised.

INTRODUCTION to Amendment

The purpose of this amendment is:

– to correct 4.1 Test methods, general, list item a): to *plural* connectors and cables.

– to improve 4.2 Test methods, test conditions, paragraphs 4, 5, and 6; and Clause 5 Procedure, paragraph 1; and Clause 6 Report, paragraph 1: to add *individual*, e.g. "to be performed on each *individual* cable".

– to correct Clause 5 Procedure, list items c) and g); and Clause 6 Report list items c), d), and e): to add "*maximum"* to the PIM level to be measured and reported.

1 Scope

This part of IEC 62037 defines a procedure to measure levels of passive intermodulation generated by a coaxial cable assembly.

This test method is applicable to jumper cables, i.e. cable assemblies intended to provide interface flexibility between rigid devices. It is also used to evaluate cable assemblies that are subjected to motion in operation.

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 62037-1:2021, *Passive RF and microwave devices, intermodulation level measurement – Part 1: General requirements and measuring methods*

IEC 62037-3, *Passive RF and microwave devices, intermodulation level measurement – Part 3: Measurement of passive intermodulation in coaxial connectors*

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