

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Standard test radio-frequency connectors –
Part 1: Generic specification – General requirements and test methods**

**Connecteurs d'essai normalisés pour fréquences radioélectriques –
Partie 1: Spécification générique – Exigences générales et méthodes d'essai**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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STANDARD TEST RADIO-FREQUENCY CONNECTORS –**Part 1: Generic specification – General requirements and test methods**

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International Standard IEC 63137-1 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories.

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

FDIS	Report on voting
46F/459/FDIS	46F/470/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 63137 series, published under the general title *Standard test radio-frequency connectors*, 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 "<http://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- withdrawn,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
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STANDARD TEST RADIO-FREQUENCY CONNECTORS –

Part 1: Generic specification – General requirements and test methods

1 Scope

This part of IEC 63137 defines general requirements for standard test radio frequency (RF) connectors (grade 0), including terms and definitions, ratings and characteristics, general requirements, test methods, quality assessment procedures, and etc.

Standard test radio frequency (RF) connectors (grade 0) are intended to measure grade 1 and grade 2 RF connectors for electrical performances. Typically, a standard test radio frequency (RF) connector (grade 0) is an adapter with one end (normally a precision connector interface) which can be connected with measurement equipment and the other end (normally a standard test connector interface) which can be connected with grade 1 or grade 2 connectors.

This specification applies to grade 0 standard test connectors (called connector, hereinafter).

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 60457-1, *Rigid precision coaxial lines and their associated precision connectors – Part 1: General requirements and measuring methods*

IEC 60617, *Graphical symbols for diagrams*

IEC 61169-1-2¹, *Radio frequency connectors – Part 1-2: Electrical test methods – Insertion loss*

IEC 61169-1-4:___², *Radio-frequency connectors – Part 1-4: Electrical test methods – voltage standing wave ratio, return loss and reflection coefficient*

IEC 62153-4-4 *Metallic communication cable test methods – Part 4-4: Electromagnetic compatibility (EMC) – Test method for measuring of the screening attenuation as up to and above 3 GHz, triaxial method*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

¹ Under preparation. Stage at the time of publication: IEC/FDIS 61169-1-2:2019.

² Under preparation. Stage at the time of publication: IEC/CDV 61169-1-4:2019.