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Irish Standard  
I.S. EN 61169-40:2011

# Radio-frequency connectors -- Part 40: Sectional specification for 2.4 series RF connectors (IEC 61169-40:2010 (EQV))

## I.S. EN 61169-40:2011

*Incorporating amendments/corrigenda issued since publication:*

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English version

**Radio-frequency connectors -  
Part 40: Sectional specification for 2.4 series RF connectors  
(IEC 61169-40:2010)**

Connecteurs pour fréquences  
radioélectriques -  
Partie 40: Spécification intermédiaire pour  
les connecteurs RF série 2.4  
(CEI 61169-40:2010)

Hochfrequenz-Steckverbinder -  
Teil 40: Rahmenspezifikation für HF-  
Steckverbinder der Serie 2.4  
(IEC 61169-40:2010)

This European Standard was approved by CENELEC on 2011-01-03. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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**CENELEC**

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

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## **Foreword**

The text of document 46F/167/CDV, future edition 1 of IEC 61169-40, prepared by SC 46F, R.F. and microwave passive components, of 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 was approved by CENELEC as EN 61169-40 on 2011-01-03.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-10-03
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-01-03

Annex ZA has been added by CENELEC.

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## **Endorsement notice**

The text of the International Standard IEC 61169-40:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61169-32      NOTE Harmonized as EN 61169-32.

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## Annex ZA (normative)

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

The following referenced documents are indispensable for the application 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.

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>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 61169-1	1992	Radio-frequency connectors -	EN 61169-1	1994
+ A1	1996	Part 1: Generic specification - General	+ A1	1996
+ A2	1997	requirements and measuring methods	+ A2	1997

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO-FREQUENCY CONNECTORS –****Part 40: Sectional specification for 2.4 series RF connectors**

## FOREWORD

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International Standard IEC 61169-40 has been prepared by subcommittee 46F: R.F. and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This first edition cancels and replaces IEC/PAS 61169-40, published in 2008, of which it constitutes a minor revision. The changes with respect to the PAS are solely editorial.

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

CDV	Report on voting
46F/167/CDV	46F/180/RVC

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 parts in the IEC 61169 series, published under the general title *Radio-frequency connectors*, can be found on the IEC website.

The committee has decided that the contents of this amendment and the base 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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## RADIO-FREQUENCY CONNECTORS –

### Part 40: Sectional specification for 2.4 series RF connectors

#### 1 Scope

This part of IEC 61169 provides information and rules for preparation of detail specification of 2.4 series R.F connectors together with the pro-forma blank detail specification.

The 2.4 series thread mated connectors with characteristic impedance  $50 \Omega$  are used for millimeter wave applications, connecting with RF cables or microstrips. The operating frequency limit is up to 50 GHz.

These connectors can be intermated with 1,85 mm (IEC 61169-32 and IEEE 287-2007) connectors.

It also prescribes mating face dimensions for high performance connectors grade 1, dimensional detail of standard test connectors grade 0, gauging information and tests selected from IEC 61169-1 applicable to all detail specifications relating to 2.4 series RF connectors.

This specification indicates recommended performance characteristics to be considered when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

NOTE Metric dimension are original dimensions.

All undimensioned pictorial configurations are for reference purpose only.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 61169-1:1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*<sup>1</sup>

Amendment 1 (1996)

Amendment 2 (1997)

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

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<sup>1</sup> There exists a consolidated edition 1.2 (1998) that comprises IEC 61169-1:1992, its Amendment 1:1996 and its Amendment 2:1997.

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