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Standards

Irish Standard  
I.S. EN 61169-18:2011

# Radio-frequency connectors -- Part 18: Sectional specification - Radio frequency coaxial connectors of type SSMA (IEC 61169-18:2011 (EQV))

## I.S. EN 61169-18:2011

*Incorporating amendments/corrigenda issued since publication:*

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EUROPEAN STANDARD  
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**EN 61169-18**

March 2011

ICS 33.120.30

English version

**Radio-frequency connectors -  
Part 18: Sectional specification -  
Radio frequency coaxial connectors of type SSMA  
(IEC 61169-18:2011)**

Connecteurs pour fréquences  
radioélectriques -  
Partie 18: Spécification intermédiaire -  
Connecteurs coaxiaux pour fréquences  
radioélectriques de type SSMA  
(CEI 61169-18:2011)

Hochfrequenz-Steckverbinder -  
Teil 18: Rahmenspezifikation -  
Hochfrequenz-Koaxial-Steckverbinder des  
Typs SSMA  
(IEC 61169-18:2011)

This European Standard was approved by CENELEC on 2011-03-03. 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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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/136/CDV, future edition 1 of IEC 61169-18, 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 61169-18 on 2011-03-03.

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) 2011-12-03
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2014-03-03

Annex ZA has been added by CENELEC.

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**Endorsement notice**

The text of the International Standard IEC 61169-18:2011 was approved by CENELEC as a European Standard without any modification.

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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 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 18: Sectional specification –  
Radio frequency coaxial connectors of type SSMA**

## FOREWORD

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International Standard IEC 61169-18 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 61169-18, published in 2009, of which it constitutes a minor revision. The only change between the PAS and this standard is the removal of inch dimensions for each of the figures.

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

CDV	Report on voting
46F/136/CDV	46F/162/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.

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The French version of this standard has not been voted upon.

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

A list of all parts of 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 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
- amended.

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## RADIO-FREQUENCY CONNECTORS –

### Part 18: Sectional specification – Radio frequency coaxial connectors of type SSMA

#### 1 Scope

SSMA series connectors with characteristic impedance 50  $\Omega$  are used for millimeter wave applications, connecting with RF cables or micro strips. The operating frequency limit is up to 35 GHz. The coupling thread is 10-36 UNS thread.

This sectional specification provides information and rules for preparation of detail specification of SSMA series R.F connectors together with the pro-forma blank detail specification.

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

#### 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 61169-1:1998/1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*<sup>1</sup>

Amendment 1 (1996)

Amendment 2 (1997)

#### 3 Mating face and gauge information

##### 3.1 Dimensions – High performance connectors – Grade 1

All undimensioned pictorial configurations are for reference purpose only.

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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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