

Irish Standard I.S. EN 61169-19:2011

Radio-frequency connectors -- Part 19: Sectional specification - Radio frequency coaxial connectors of type SSMB (IEC 61169-19:2011 (EQV))

© NSAI 2011 No copying without NSAI permission except as permitted by copyright law.

Northwood, Santry

Dublin 9

Incorporating amendments/corrigenda issued since publication:		

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces		ent is based on: 9:2011	Publish 4 Marc	ned: h, 2011
This document was publi under the authority of the 21 March, 2011	shed NSAI and comes into effect	on:		ICS number: 33.120.30
NSAI 1 Swift Square,	T +353 1 807 3800 F +353 1 807 3838	<b>Sales:</b> T +353 1 8	57 6730	

F +353 1 857 6729

W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

E standards@nsai.ie

W NSALie

**EUROPEAN STANDARD** 

EN 61169-19

NORME EUROPÉENNE EUROPÄISCHE NORM

March 2011

ICS 33.120.30

English version

# Radio-frequency connectors Part 19: Sectional specification Radio frequency coaxial connectors of type SSMB

(IEC 61169-19:2011)

Connecteurs pour fréquences radioélectriques Partie 19: Spécification intermédiaire Connecteurs coaxiaux pour fréquences radioélectriques de type SSMB (CEI 61169-19:2011)

Hochfrequenz-Steckverbinder -Teil 19: Rahmenspezifikation -Hochfrequenz-Koaxial-Steckverbinder des Typs SSMB (IEC 61169-19:2011)

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

### **CENELEC**

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

EN 61169-19:2011

#### **Foreword**

- 2 -

The text of document 46F/138/CDV, future edition 1 of IEC 61169-19, 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 61169-19 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.

#### **Endorsement notice**

The text of the International Standard IEC 61169-19:2011 was approved by CENELEC as a European Standard without any modification.

- 3 -

EN 61169-19:2011

## 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>	EN/HD	<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

This is a free page sample. Access the full version online.

I.S. EN 61169-19:2011

This page is intentionally left BLANK.

- 2 -

61169-19 © IEC:2011

### **CONTENTS**

FO	REWO	DRD	4
1	Scop	e	6
2	Norm	native references	6
3	Matir	ng face and gauge information	6
	3.1	Dimensions – General purpose connectors – Grade 2	6
		3.1.1 Connector with socket-centre contact	
		3.1.2 Connector with pin-centre contact	8
	3.2	Gauges	9
		3.2.1 Gauge pins for socket-centre contact	9
		3.2.2 Test procedure	9
		3.2.3 Gauge for outer contact of socket-centre contact	
		3.2.4 Test procedure	
	3.3	Dimensions – Standard test connectors – Grade 0	
		3.3.1 Connector with socket-centre contact	
		3.3.2 Connector with pin-centre contact	
4	Quali	ity assessment procedure1	
	4.1	General1	-
	4.2	Rating and characteristics (see Clause 6 of IEC 61169-1)	
	4.3	Test schedule and inspection requirements – Acceptance tests	
		4.3.1 Acceptance tests	
		4.3.2 Periodic tests	
	4.4	Procedures	
		4.4.1 Quality conformance inspection	
_	1	4.4.2 Qualification approval and its maintenance	
5		uctions for preparation of detail specifications	
	5.1	General	
	5.2	Identification of the component	
	5.3	Performance	
	5.4	Marking, ordering information and related matters	
	5.5 5.6	Selection of tests, test conditions and severities	
	5.0	Blank detail specification pro-forma for type SSMB conflector2	U
Eia	uro 1	Connector with eacket centre centect (for dimensions and notes, see Table 1)	7
_		- Connector with socket-centre contact (for dimensions and notes, see Table 1)	
_		- Connector with pin-centre contact (for dimensions and notes, see Table 2)	
•		<ul> <li>Gauge pins for socket-centre contact (for dimensions and notes, see Table 3)</li> </ul>	9
		<ul><li>Outer contact sizing and retention force gauges A and B (for dimensions s, see Table 4)</li></ul>	Λ
		- Connector with socket-centre contact (for dimensions and notes, see Table 5) 1	
·		•	
Fig	ure 6	<ul> <li>Connector with pin-centre contact (for dimensions and notes, see Table 6)1</li> </ul>	2
T - '	ala 4	Dimensions of composter with society control	_
		- Dimensions of connector with socket-centre contact	
		- Dimensions of connector with pin-centre contact	
		- Dimensions of gauge pins for socket-centre contact	
Tab	ole 4 –	- Dimensions of gauge for outer contact1	0
Tab	ole 5 –	- Dimensions of connector with socket-centre contact	1

61169-19 © IEC:2011	– 3 –
---------------------	-------

Table 6 – Dimensions of connector with pin-centre contact	. 12
Table 7 – Rating and characteristics	. 13
Table 8 – Acceptance tests	. 15
Table 9 – Periodic tests	. 16

**-4** -

61169-19 © IEC:2011

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **RADIO-FREQUENCY CONNECTORS -**

### Part 19: Sectional specification – Radio frequency coaxial connectors of type SSMB

#### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61169-19 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 61169-19, published in 2009, of which it constitutes a minor revision. The only change is that the PAS has been changed into and International Standard.

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

CDV	Report on voting
46F/138/CDV	46F/163/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.

61169-19 © IEC:2011

- 5 -

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.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

**-** 6 **-**

61169-19 © IEC:2011

#### **RADIO-FREQUENCY CONNECTORS -**

## Part 19: Sectional specification – Radio frequency coaxial connectors of type SSMB

#### 1 Scope

The SSMB series connectors with characteristic impedance 50  $\Omega$  are one kind of low power miniature connectors with snap-on coupling mechanism and have the characteristics of light weight, small size, convenient connection and excellent characteristics. This connector range is suitable for the standard ranges of flexible and semi-rigid cables and is also available as a PCB mounted version. The connectors are usable up to a frequency of 3 GHz.

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

It also prescribes mating face dimensions for grade 2 general purpose 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 SSMB 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 61169-1:1992, 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 – General purpose connectors – Grade 2

#### 3.1.1 Connector with socket-centre contact

All non-dimensioned pictorial configurations are for reference purpose only.

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



This is a free preview	<ul> <li>Purchase the entire</li> </ul>	e publication at the link below:
------------------------	---	----------------------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation