SVENSK STANDARD SS-EN IEC 61169-60

Fastställd	Utgåva	Sida	Ansvarig kommitté
2021-12-15	1	1 (1+32)	SEK TK 46

Anslutningsdon för radiofrekvens – Del 60: Gruppspecifikation för koaxialdon med instickskontakter, 50 Ohm (typ SMPM)

Radio-frequency connectors – Part 60: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ohm (type SMPM)

Som svensk standard gäller europastandarden EN IEC 61169-60:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61169-60:2021.

Nationellt förord

Europastandarden EN IEC 61169-60:2021

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 61169-60, First edition, 2021 - Radio-frequency connectors - Part 60: Sectional specification for RF coaxial connectors with push on mating - Characteristic impedance 50 Ohm (type SMPM)**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 33.120.30

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61169-60

April 2021

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English Version

Radio-frequency connectors - Part 60: Sectional specification for RF coaxial connectors with push on mating - Characteristic impedance 50 Ohm (type SMPM) (IEC 61169-60:2021)

Connecteurs pour fréquences radioélectriques - Partie 60: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques avec couplage par poussée - Impédance caractéristique 50 Ohm (type SMPM)
(IEC 61169-60:2021)

Hochfrequenz-Steckverbinder - Teil 60: Rahmenspezifikation für koaxiale HF-Steckverbinder mit Push-On Verbindung - Wellenwiderstand 50 Ohm (Typ SMPM)
(IEC 61169-60:2021)

This European Standard was approved by CENELEC on 2021-04-21. 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.

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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 CEN-CENELEC Management Centre 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 61169-60:2021 E

European foreword

The text of document 46F/548/FDIS, future edition 1 of IEC 61169-60, prepared by SC 46F "RF and microwave passive components" of IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61169-60:2021.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2022-01-21
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2024-04-21

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

Endorsement notice

The text of the International Standard IEC 61169-60:2021 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 61169-1	2013	Radio frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 62037	series	RF connectors, connector cable assemblies and cables - Intermodulation level measurement	EN IEC 62037	series

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Radio-frequency connectors – Part 60: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ohm (type SMPM)

Connecteurs pour fréquences radioélectriques – Partie 60: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques avec couplage par poussée – Impédance caractéristique 50 Ohm (type SMPM)

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Part 60: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ohm (type SMPM)

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.
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IEC 61169-60 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. It is an International Standard.

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

FDIS	Report on voting
46F/548/FDIS	46F/555/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 parts of the IEC 61169 series, under the general title *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
- amended.

RADIO-FREQUENCY CONNECTORS –

Part 60: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ohm (type SMPM)

1 Scope

This part of IEC 61169, which is a sectional specification (SS), provides information and rules for the preparation of detail specifications (DS) for RF coaxial connectors with push-on coupling, typically for use in 50 Ω RF cables or micro-strips in microwave, telecommunication, wireless systems and other fields (SMPM).

It specifies mating face dimensions for general purpose connectors – grade 2, dimensional details of standard test connectors-grade 0, gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to series SMPM 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.

The SMPM push-on coupling structure series RF coaxial connectors with the characteristic of normative impedance 50 Ω are used with various kinds of RF cables or micro-strips in microwave, telecommunication, wireless systems. The operating frequency limit is up to 65 GHz.

NOTE Imperial dimensions are original dimensions. All undimensioned pictorial configurations are for reference purpose only.

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

IEC 61169-1:2013, *Radio frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

IEC 62037 (all parts), *Passive RF and microwave devices, intermodulation level measurement*