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**Radiofrekvenčni konektorji - 60. del: Področna specifikacija za radiofrekvenčne (RF) koaksialne konektorje s potisnim osnim spajanjem - Karakteristična impedanca 50 Ohm (tip SMPM) (IEC 61169-60:2021)**

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)

Hochfrequenz-Steckverbinder - Teil 60: Rahmenspezifikation für koaxiale HF-Steckverbinder mit Innendurchmesser des Außenleiters in mm Push-On / SMPM Typ - Wellenwiderstand 50 Ohm (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)

**Ta slovenski standard je istoveten z: EN IEC 61169-60:2021**

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**ICS:**

33.120.30      Radiofrekvenčni konektorji      RF connectors  
(RF)

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EUROPEAN STANDARD

**EN IEC 61169-60**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2021

ICS 33.120.30

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)

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**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

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## 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](http://www.cenelec.eu).

<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	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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IEC 61169-60

Edition 1.0 2021-03

# 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)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 33.120.30

ISBN 978-2-8322-9541-0

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## RADIO-FREQUENCY CONNECTORS –

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

## FOREWORD

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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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://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.

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## 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  $\Omega$  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  $\Omega$  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.

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#### 2 Normative references

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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*

#### 3 Terms and definitions

No terms and definitions are listed in this document.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>