ICS 33.060 SLOVENSKÁ TECHNICKÁ NORMA Október 2024

STN	**Vysokofrekvenčné konektory Časť 69: Rámcová špecifikácia VF koaxiálnych konektorov s push-on pripojením Charakteristická impedancia 50 Ohm (typ SMP3)**	**STN EN IEC 61169-69** 35 3811

Radio-frequency connectors - Part 69: Sectional specification for RF coaxial connectors with push on mating - Characteristic impedance 50 (type SMP3)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/24

Obsahuje: EN IEC 61169-69:2024, IEC 61169-69:2024

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN IEC 61169-69

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English Version

Radio-frequency connectors - Part 69: Sectional specification for RF coaxial connectors with push on mating - Characteristic impedance 50 O (type SMP3) (IEC 61169-69:2024)

Connecteurs pour fréquences radioélectriques - Partie 69: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques à accouplement par poussée - Impédance caractéristique 50 O (type SMP3) (IEC 61169-69:2024)

Hochfrequenzsteckverbinder - Teil 69: Rahmenspezifikation für HF-Koaxialsteckverbinder mit Push-On-Verbindung - Wellenwiderstand 50 Ohm (Typ SMP3) (IEC 61169-69:2024)

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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 61169-69:2024 E

EN IEC 61169-69:2024 (E)

European foreword

The text of document 46F/666/FDIS, future edition 1 of IEC 61169-69, 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 61169-69:2024.

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) 2025-04-17
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2027-07-17

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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.cencenelec.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 61169-69

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FOREWORD

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IEC 61169-69 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:

Draft	Report on voting
46F/666/FDIS	46F/671/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/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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

RADIO-FREQUENCY CONNECTORS –

Part 69: Sectional specification for RF coaxial connectors with push on mating – Characteristic impedance 50 Ω (type SMP3)

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 (SMP3).

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 SMP3 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 SMP3 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, and other fields. The operating frequency limit is up to 65 GHz.

NOTE Imperial dimensions are the original dimensions since this is a very miniature RF connector. There is a concern that conversion to the metric system could lead to rounding errors which can lead to performance degradation from the original imperial design. The SMPM connector was released as an imperial design for this reason. All undimensioned pictorial information is for reference 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 61169-1:2013, *Radio frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

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