

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Radio-frequency connectors -
Part 64: Sectional specification - RF coaxial connectors with 0,8 mm inner
diameter of outer conductor - Characteristic impedance 50 Ω (type 0,8)**

**Connecteurs pour fréquences radioélectriques -
Partie 64: Spécification intermédiaire - Connecteurs RF coaxiaux avec un
conducteur extérieur d'un diamètre intérieur de 0,8 mm - Impédance
caractéristique de 50 Ω (type 0,8)**

<https://standards.iteh.org/standards/iec/61169-64/iec-61169-64-2025>



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2025 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

IEC Secretariat
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search -

webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee, ...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Discover our powerful search engine and read freely all the publications previews, graphical symbols and the glossary. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 500 terminological entries in English and French, with equivalent terms in 25 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Recherche de publications IEC -

webstore.iec.ch/advsearchform

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études, ...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

IEC Just Published - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et une fois par mois par email.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Découvrez notre puissant moteur de recherche et consultez gratuitement tous les aperçus des publications, symboles graphiques et le glossaire. Avec un abonnement, vous aurez toujours accès à un contenu à jour adapté à vos besoins.

Electropedia - www.electropedia.org

Le premier dictionnaire d'électrotechnologie en ligne au monde, avec plus de 22 500 articles terminologiques en anglais et en français, ainsi que les termes équivalents dans 25 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

Warning! Make sure that you obtained this publication from an authorized distributor.

Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Mating face and gauge information	6
4.1 Material	6
4.2 Reference position	6
4.3 Datum system	6
4.4 Dimensions – High performance connector – Grade 1	6
4.4.1 Connector with pin centre contact – Grade 1	6
4.4.2 Connector with socket centre contact – Grade 1	7
4.5 Dimensions – Standard test connector – Grade 0	9
4.5.1 Connector with pin centre contact – Grade 0	9
4.5.2 Connector with socket centre contact – Grade 0	10
4.6 Optional design of coupling nut	11
4.7 Gauging of socket centre contacts	11
4.7.1 Gauge pins	11
4.7.2 Test sequence	12
5 Quality assessment procedures	12
5.1 General	12
5.2 Ratings and characteristics	12
5.3 Test schedule and inspection requirements	14
5.3.1 Acceptance tests	14
5.3.2 Periodic tests	14
5.4 Procedures for quality conformance	14
5.4.1 Quality conformance inspection	14
5.4.2 Quality conformance and its maintenance	14
6 Instructions for preparation of detail specifications	14
6.1 General	14
6.2 Identification of the component	14
6.3 Performance	14
6.4 Marking, ordering information and related matters	14
6.5 Selection of tests, test conditions and severities	14
6.6 Blank detail specification pro-forma for type 0,8 connectors	14
7 Marking	15
7.1 Marking of component	15
7.2 Marking and contents of package	15
Bibliography	16
Figure 1 – Connector with pin centre contact – Grade 1	7
Figure 2 – Connector with socket centre contact – Grade 1	8
Figure 3 – Connector with pin centre contact – Grade 0	9
Figure 4 – Connector with socket centre contact – Grade 0	10
Figure 5 – Optional design of coupling nut	11
Figure 6 – Gauge pin for socket centre contact	11

Table 1 – Dimensions of connector with pin centre contact – Grade 1	7
Table 2 – Dimensions of connector with socket centre contact – Grade 1	8
Table 3 – Dimensions of connector with pin centre contact – Grade 0	9
Table 4 – Dimensions of connector with socket centre contact – Grade 0	10
Table 5 – Dimensions of gauge pins for socket centre contact	11
Table 6 – Ratings and characteristics	12

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[IEC 61169-64:2025](https://standards.iteh.ai/catalog/standards/iec/fe46e5e0-efde-4ae3-9f9a-813e618b69b3/iec-61169-64-2025)

<https://standards.iteh.ai/catalog/standards/iec/fe46e5e0-efde-4ae3-9f9a-813e618b69b3/iec-61169-64-2025>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Radio-frequency connectors -
Part 64: Sectional specification -
RF coaxial connectors with 0,8 mm inner diameter of outer conductor -
Characteristic impedance 50 Ω (type 0,8)**

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) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61169-64 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.

This second edition cancels and replaces the first edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) upgrading of the inferior connector class to a grade 1 "high performance connector";
- b) alignment of the mating face dimensions as well as the ratings and characteristics with the precision 0,8 mm connectors specified in the IEEE 287.1-2021 and IEEE 287.3-2021 standards;