

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Radio frequency and coaxial cable assemblies –  
Part 4-2: Detail specification for semi-rigid cable assemblies (jumper) –  
Frequency range up to 6 000 MHz, type 50-9 semi-rigid coaxial cable**

**Cordons coaxiaux et cordons pour fréquences radioélectriques –  
Partie 4-2: Spécification particulière pour les cordons semi rigides (jarretières) –  
Plage de fréquences jusqu'à 6 000 MHz, câble coaxial semi-rigide de type 50-9**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

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ICS 33.120.01

ISBN 978-2-8322-3891-2

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO FREQUENCY AND COAXIAL CABLE ASSEMBLIES –****Part 4-2: Detail specification for semi-rigid cable assemblies (jumper) –  
Frequency range up to 6 000 MHz, type 50-9 semi-rigid coaxial cable**

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IEC 60966-4-2 has been prepared by subcommittee 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
46/882/FDIS	46/893/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 in the IEC 60966 series, published under the general title *Radio frequency and coaxial cable assemblies*, can be found on the IEC website.

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## RADIO FREQUENCY AND COAXIAL CABLE ASSEMBLIES –

### Part 4-2: Detail specification for semi-rigid cable assemblies (jumper) – Frequency range up to 6 000 MHz, type 50-9 semi-rigid coaxial cable

#### 1 Scope

This part of IEC 60966 is a detail specification that relates to semi-rigid cable assemblies composed of type 50-9 semi-rigid coaxial cables with foamed polyethylene dielectric and connectors such as type 7-16 (IEC 61169-4), type 4.1-9.5 (IEC 61169-11), type N (IEC 61169-16), type S7-16 (IEC 61169-53) or type 4.3-10 (IEC 61169-54).

This detail specification applies to the cable assemblies (jumper cables) for mobile communication, particular for the cable assemblies used between the main feeder and antennas or between the main feeder and equipment system or between remote radio heads and antennas. The operating frequency is up to 6 000 MHz.

#### 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 60068-2-11, *Environmental testing – Part 2-11: Tests – Test Ka:Salt mist*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60966-1:2019, *Radio frequency and coaxial cable assemblies – Part 1: Generic specification – General requirements and test methods*

IEC 60966-4, *Radio frequency and coaxial cable assemblies – Part 4: Sectional specification for semi-rigid coaxial cable assemblies*

IEC 60966-4-1, *Radio frequency and coaxial cable assemblies – Part 4-1: Blank detail specification for semi-rigid coaxial cable assemblies*

IEC 61169-4, *Radio-frequency connectors – Part 4: RF coaxial connectors with inner diameter of outer conductor 16 mm (0,63 in) with screw lock – Characteristic impedance 50  $\Omega$  (type 7-16)*

IEC 61169-11, *Radio-frequency connectors – Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling – Characteristic impedance 50  $\Omega$  (Type 4,1-9,5)*

IEC 61169-16, *Radio-frequency connectors – Part 16: Sectional specification – RF coaxial connectors with inner diameter of outer conductor 7 mm (0,276 in) with screw coupling – Characteristics impedance 50 ohms (75 ohms) (type N)*

IEC 61169-53, *Radio-frequency connectors – Part 53: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 16 mm with screw lock – Characteristic impedance 50  $\Omega$  (Type S7-16)*