IEC 61196-1-111

Edition 3.0 2024-09

INTERNATIONAL STANDARD

colour inside

Coaxial communication cables –
Part 1-111: Electrical test methods – Stability of phase test methods

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.120.10

ISBN 978-2-8322-9609-7

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COAXIAL COMMUNICATION CABLES –

Part 1-111: Electrical test methods – Stability of phase test methods

FOREWORD

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IEC 61196-1-111 has been prepared by subcommittee 46A: Coaxial cables, 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 2014. This edition constitutes a technical revision.

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

a) addition of the list of test methods in the Scope;
b) addition of "the number of scanning points" in every test method;
c) addition of Annex A, Phase consistency test for two or more cables;
d) addition of Annex B, Phase variation with temperature test between two cables.

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

Draft	Report on voting
46A/1666/CDV	46A/1680/RVC

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 in the IEC 61196 series, published under the general title *Coaxial communication cables*, 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- withdrawn, or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.

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COAXIAL COMMUNICATION CABLES –

Part 1-111: Electrical test methods – Stability of phase test methods

1 Scope

This part of IEC 61196 provides test methods to determine the stability of phase of coaxial communication cables.

This document is applicable to RF coaxial cables. RF coaxial cable assemblies can also use this document for reference.

This part of IEC 61196 comprises following test methods:

a) phase variation with temperature (Clause 4);
b) phase constant variation with temperature (Clause 5);
c) phase stability with bending (Clause 6);
d) phase stability with twisting (Clause 7);
e) phase consistency test for two or more cables (Annex A);
f) phase variation with temperature test between two cables (Annex B).

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 61196-1, *Coaxial communication cables – Part 1: Generic specification – General, definitions and requirements*

IEC 61196-1-108:2011, *Coaxial communication cables – Part 1-108: Electrical test methods – Test for characteristic impedance, phase and group delay, electrical length and propagation velocity*