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Draft IS/IEC 61196-1-100:2022
May 2024

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

मसौदा भारतीय मानक
समाक्ष संचार केबल
भाग 1: विद्युतीय परीक्षण विधियाँ
अनुभाग 100: सामान्य आवश्यकताएँ
(पहला पुनरीक्षण)

Draft Indian Standard
Coaxial Communication Cables –
Part 1: Electrical Test Methods –
Section 100: General Requirements
(First Revision)

ICS 33.120.10

LITD 06-Wires, Cables, Waveguides and Accessories Sectional Committee	**Last Date for Comments:** 07 July 2024.

NATIONAL FOREWORD

(Formal clauses will be added later)

This Draft Indian Standard (Part 1/Section 100) (First Revision) which is identical with IEC 61196-1-100:2022 'Coaxial communication cables - Part 1-100: Electrical test methods - General requirements' issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendation of Wires, Cables, Waveguides and Accessories Sectional Committee (LITD 06) and approval of the Electronics and Information Technology Division Council.

This standard was originally published in 2011 and was identical with IEC 61196-1-100: 2005. The first revision of the Indian Standard has been under taken up to align it with the latest version of IEC 61196-1-100:2022.

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

a) update of Annex A, Electrical test methods of the IEC 61196-1-1xx series

The text of IEC Standard *may be* approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appears referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Corresponding Indian Standards	Degree of Equivalence
IEC 61196-1:2005, Coaxial communication cables – Part 1: Generic specification – General, definitions and requirements	IS/IEC 61196-1 : 2005 Coaxial communication cables: Part 1 generic specification - General, definitions and requirements	Identical

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values *(Second Revision)*'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

SCOPE OF IEC 61196-1-100: 2022

"This part of IEC 61196 gives the general requirements and conditions for electrical tests to be performed on coaxial communication cables and applies to IEC 61196-1-1xx (all parts), which specifies electrical test methods for coaxial communication cables.

Further test details (for example, temperature, duration) and/or test requirements are given in the relevant test procedure and/or the relevant sectional or detail specification. A table with electrical test methods of the IEC 61196-1-1xx series is given in Annex A (Given Below).

Annex A
Electrical test methods of the IEC 61196-1-1xx series

IEC 61196-1-1xx series: Coaxial communication cables – Part 1-1xx: Electrical test methods, consists of the following documents:

IEC 61196-1-100:2022 General requirements

IEC 61196-1-101:2015 Test for conductor d.c. resistance of cable

IEC 61196-1-102:2005 Test for insulation resistance of cable dielectric

IEC 61196-1-103:2015 Test for capacitance of cable

IEC 61196-1-104:2015 Test for the stability of the capacitance of cable versus temperature

IEC 61196-1-105:2005 Test for withstand voltage of cable dielectric

IEC 61196-1-106:2008 Test for withstand voltage of cable sheath

IEC 61196-1-107:2005 Test for cable microphony charge level (mechanically induced noise)

IEC 61196-1-108:2011 Test for characteristic impedance, phase and group delay, electrical length and propagation velocity

IEC 61196-1-110:2016 Test for continuity

IEC 61196-1-111:2014 Stability of phase test methods

IEC 61196-1-112:2006 Test for return loss (uniformity of impedance)

IEC 61196-1-113:2018 Test for attenuation constant

IEC 61196-1-114:2015 Test for inductance

IEC 61196-1-115:2006 Test for regularity of impedance (pulse/step function return loss)

IEC 61196-1-116:2015 Test for impedance with time domain reflectometry (TDR)

IEC 61196-1-119:2020 RF average power rating

IEC 61196-1-122:2006 Test for cross-talk between coaxial cables

IEC 61196-1-123 :— Test for attenuation constant of radiating cable [1]

IEC 61196-1-124 :— Test for coupling loss of radiating cable [2]

IEC 61196-1-125 :— Test for equivalent permittivity and equivalent dissipation loss of dielectric [3]

IEC 61196-1-126 :— Corona extinction voltage [4]

1. Under preparation. Stage at the date of publication: IEC/CDV 61196-1-123:2021.
2. Under preparation. Stage at the date of publication: IEC/CDV 61196-1-124:2021.
3. Under preparation. Stage at the date of publication: IEC/CDV 61196-1-125:2021.
4. Under preparation. Stage at the date of publication: IEC/CDV 61196-1-126:2021.

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Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details please refer to IEC 61196-1-100: 2022 or kindly contact.

Head,
Electronics & IT Department
Bureau of Indian Standards
9, B.S. Zafar Marg,
New Delhi-110002
Email: hlitd@bis.gov.in, litd6@bis.gov.in
Tele: 011-23608451