ICS 33.100.10, 33.120.10 SLOVENSKÁ TECHNICKÁ NORMA Január 2022

STN	**Skúšobné metódy kovových káblov a iných pasívnych súčiastok Časť 4-5: Elektromagnetická kompatibilita (EMC) Tlmenie spojenia alebo tienenia Metóda absorpčnej svorky**	**STN EN IEC 62153-4-5** 34 7012

Metallic communication cable test methods - Part 4-5: Electromagnetic compatibility (EMC) - Screening or coupling attenuation - Absorbing clamp method

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. 12/21

Obsahuje: EN IEC 62153-4-5:2021, IEC 62153-4-5:2021

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62153-4-5

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English Version

Metallic communication cable test methods - Part 4-5: Electromagnetic compatibility (EMC) - Screening or coupling attenuation - Absorbing clamp method (IEC 62153-4-5:2021)

Méthodes d'essai des câbles métalliques de communication - Partie 4-5: Compatibilité électromagnétique (CEM) - Affaiblissement d'écran ou de couplage - Méthode de la pince absorbante (IEC 62153-4-5:2021)

Prüfverfahren für metallische Kommunikationskabel - Teil 4-5: Elektromagnetische Verträglichkeit (EMV) - Kopplungsdämpfung oder Schirmdämpfung - Verfahren mit Absorberzangen (IEC 62153-4-5:2021)

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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 62153-4-5:2021 E

European foreword

The text of document 46/819/FDIS, future edition 2 of IEC 62153-4-5, prepared by 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 62153-4-5:2021.

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) 2022–06–30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024–09–30

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Endorsement notice

The text of the International Standard IEC 62153-4-5:2021 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62153-4-3 NOTE Harmonized as EN 62153-4-3[1]

[1] To be published. Stage at the time of publication: prEN 62153-4-3:2021.

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.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60050-726	-	International Electrotechnical Vocabulary (IEV) – Part 726: Transmission lines and waveguides		-
IEC/TS 62153-4-1	-	Metallic communication cable test methods - Part 4–1: Electromagnetic compatibility (EMC) - Introduction to electromagnetic screening measurements		-
CISPR 16-1-3	2004	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1–3: Radio disturbance and immunity measuring apparatus - Ancillary equipment - Disturbance power	EN 55016-1-3	2006
ITU-T G.117	1996	Transmission aspects of unbalance about earth		-
ITU-T O.9	1999	Measuring arrangements to assess the degree of unbalance about earth		-

IEC 62153-4-5

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INTERNATIONAL STANDARD

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colour inside

Metallic communication cable test methods – Part 4-5: Electromagnetic compatibility (EMC) – Screening or coupling attenuation – Absorbing clamp method

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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METALLIC COMMUNICATION CABLE TEST METHODS –

Part 4-5: Electromagnetic compatibility (EMC) – Screening or coupling attenuation – Absorbing clamp method

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.
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IEC 62153-4-5 has been prepared by 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 2006. This edition constitutes a technical revision.

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

a) reorganisation of clauses and annexes;
b) extension of frequency range to 2,4 GHz;
c) application of a virtual balun respectively balunless test procedure with multiport VNA.

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

FDIS	Report on voting
46/819/FDIS	46/829/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/standardsdev/publications.

This standard is intended to be read in conjunction with IEC TS 62153-4-1:2014, which describes the theoretical background.

A list of all parts in the IEC 62153-4-n series, under the general title: *Metallic communication cable test methods − Electromagnetic Compatibility (EMC)* 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 "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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METALLIC COMMUNICATION CABLE TEST METHODS –

Part 4-5: Electromagnetic compatibility (EMC) – Screening or coupling attenuation – Absorbing clamp method

1 Scope

The absorbing clamp method is suitable to determine the screening- or the coupling-attenuation of metallic communication cables in the frequency range of 30 MHz to 1 000 MHz (2 400 MHz), depending on the performance of the clamp. It is an alternative method to the triaxial method of IEC 62153-4-4 or IEC 62153-4-9. Due to the undefined outer circuit of this absorbing clamp method, the test results obtained at different places and laboratories could vary by at least ± 6 dB.

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 60050-726, *International Electrotechnical Vocabulary (IEV) – Part 726: Transmission lines and waveguides*

IEC TS 62153-4-1, *Metallic communication cable test methods – Part 4-1: Electromagnetic compatibility (EMC) – Introduction to electromagnetic screening measurements*

CISPR 16-1-3:2004, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-3: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Disturbance power*

ITU-T G.117:1996, *Transmission aspects of unbalance about earth*

ITU-T O.9:1999, *Measuring arrangements to assess the degree of unbalance about earth*