

INTERNATIONAL STANDARD



**Metallic communication cable test methods –
Part 4-14: Electromagnetic compatibility (EMC) – Coupling attenuation of cable
assemblies (field conditions) absorbing clamp method**



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

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

METALLIC COMMUNICATION CABLE TEST METHODS –**Part 4-14: Electromagnetic compatibility (EMC) –
Coupling attenuation of cable assemblies
(field conditions) absorbing clamp method**

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International Standard IEC 62153-4-14 has been prepared by IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

The text of this standard is based on the following documents:

FDIS	Report on voting
46/400/FDIS	46/415/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62153 series, published under the general title: *Metallic communication cable test methods*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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- withdrawn,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

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METALLIC COMMUNICATION CABLE TEST METHODS –

Part 4-14: Electromagnetic compatibility (EMC) – Coupling attenuation of cable assemblies (field conditions) absorbing clamp method

1 Scope

This part of IEC 62153 gives the in-field test method that is used to determine the coupling attenuation for installed links and channels used in analogue and digital communication systems.

This method is used to determine the attenuation of disturbing power to signal power in a cabling system, and vice versa. This determines the influence from cabling on the EMC performance of a system.

NOTE 1 The coupling attenuation of installed links and channels is dependent upon the performance of the cabling components (balance and screening if applicable), workmanship (especially termination of screens) and earthing and grounding. This procedure determines the overall effect of these parameters.

NOTE 2 This method cannot be used for verification of compliance with emission and immunity EMC standards for the complete system, including active components.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts), *International Electrotechnical Vocabulary* (available at <http://www.electropedia.org/>)

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

IEC 62153-4-5:2006, *Metallic communication cable test methods – Part 4-5: Electromagnetic Compatibility (EMC) – Coupling or screening attenuation – Absorbing clamp method*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-726 and IEC 61196-1 apply.

The theoretical background is given in IEC/TR 62153-4-0 and IEC/TR 62153-4-1.