



BSI Standards Publication

Metallic cables and other passive components test methods

Part 4-16: Electromagnetic compatibility (EMC) — Extension of the frequency range to higher frequencies for transfer impedance and to lower frequencies for screening attenuation measurements using the triaxial set-up

National foreword

This British Standard is the UK implementation of EN IEC 62153-4-16:2021. It is identical to IEC 62153-4-16:2021, incorporating corrigendum 1:2023. It supersedes BS IEC 62153-4-16:2016, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/46, Cables, wires and waveguides, radio frequency connectors and accessories for communication and signalling.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Published by BSI Standards Limited 2023

ISBN 978 0 539 29520 7

ICS 33.120.10

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 October 2021.

Amendments/corrigenda issued since publication

Date	Text affected
31 December 2023	Implementation of IEC corrigendum November 2023: Clause 7, Formula 3 corrected

English Version

**Metallic cables and other passive components test methods -
Part 4-16: Electromagnetic compatibility (EMC) - Extension of
the frequency range to higher frequencies for transfer
impedance and to lower frequencies for screening attenuation
measurements using the triaxial set-up
(IEC 62153-4-16:2021)**

Méthodes d'essai des câbles métalliques et autres
composants passifs - Partie 4-16: Compatibilité
électromagnétique (CEM) - Extension de la plage de
fréquences à des fréquences supérieures pour l'impédance
de transfert et à des fréquences inférieures pour mesurer
l'affaiblissement d'écran à l'aide d'un montage triaxial
(IEC 62153-4-16:2021)

Prüfverfahren für metallische Kommunikationskabel - Teil 4-
16: Elektromagnetische Verträglichkeit (EMV) - Erweiterung
des Frequenzbereiches zu höheren Frequenzen für den
Kopplungswiderstand und zu niedrigeren Frequenzen für
die Schirmdämpfung bei Messungen mit dem
Triaxialverfahren
(IEC 62153-4-16:2021)

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European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 46/817/FDIS, future edition 2 of IEC 62153-4-16, 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 62153-4-16:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-06-28 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-09-28 document have to be withdrawn

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The text of the International Standard IEC 62153-4-16:2021 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62153-4-3	2013	Metallic communication cable test methods - - Part 4-3: Electromagnetic compatibility (EMC) - Surface transfer impedance - Triaxial method		-
IEC 62153-4-15	-	Metallic cables and other passive components test methods - Part 4-15: Electromagnetic compatibility (EMC) - Test method for measuring transfer impedance and screening attenuation - or coupling attenuation with triaxial cell	EN IEC 62153-4-15 -	

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms, definitions and abbreviated terms	5
3.1 Terms and definitions.....	5
3.2 Abbreviated terms.....	6
4 Overview	6
5 Frequency behaviour of the triaxial set-up	7
6 Extrapolation of transfer impedance measurement results	9
6.1 General.....	9
6.2 Example of a measurement according to IEC 62153-4-3, Method B	9
6.3 Example of a measurement according to IEC 62153-4-3, Method C	10
7 Extrapolation of screening attenuation measurement results	12
8 Determination of the relative dielectric permittivity and impedance of the inner and outer circuits.....	14
8.1 General.....	14
8.2 Influence of the test head.....	17
Bibliography.....	20
Figure 1 – Simulation of the scattering parameter S_{21} (left hand scale) and the transfer impedance (right hand scale) for a single braid screen	7
Figure 2 – Comparison of formulae for conversion between forward transfer scattering parameter and transfer impedance.....	9
Figure 3 – Example of the extrapolation of the transfer impedance of an RG59 type cable.....	10
Figure 4 – Measurement of transfer impedance of a single braided cable	11
Figure 5 – Conversion of measured scattering parameter S_M to the transfer impedance of a single braided cable	12
Figure 6 – Example of the extrapolation of the scattering parameter S_{21} in logarithmic frequency scale of an RG59 type cable	13
Figure 7 – Example of the extrapolation of the scattering parameter S_{21} in linear frequency scale of an RG59 type cable	14
Figure 8 – Measurement of S_{11} of the outer circuit (tube) having a length of 203 cm	16
Figure 9 – Example of test head (COMET set-up)	17
Figure 10 – Example of how to obtain the electrical length of the test head from the S_{11} measurement using a bare copper wire as DUT (COMET set-up)	18
Figure 11 – Example of an RG58 type cable in 2 m triaxial set-up (COMET)	19
Table 1 – Parameters for simulation of triaxial set-up.....	8

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**METALLIC CABLES AND OTHER
PASSIVE COMPONENTS TEST METHODS –****Part 4-16: Electromagnetic compatibility (EMC) –
Extension of the frequency range to higher frequencies
for transfer impedance and to lower frequencies for screening
attenuation measurements using the triaxial set-up**

FOREWORD

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IEC 62153-4-16 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 2016. This edition constitutes a technical revision.

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

- Replacement of the conversion formula which was limited to a matched DUT by a new conversion formula suitable for any load conditions.

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

FDIS	Report on voting
46/817/FDIS	46/826/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.

A list of all parts in the IEC 62153 series, published under the general title *Metallic cables and other passive components test methods*, can be found on the IEC website.

Future documents in this series will carry the new general title as cited above. Titles of existing documents in this series will be updated at the time of the next edition.

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

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- withdrawn,
- replaced by a revised edition, or
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