

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-43: Tests - Screen testing of return loss of single-mode PC optical fibre connectors

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Fibre optic interconnecting devices and passive components -
Basic test and measurement procedures - Part 2-43: Tests -
Screen testing of return loss of single-mode PC optical fibre
connectors
(IEC 61300-2-43:2022)

Dispositifs d'interconnexion et composants passifs
fibroniques - Procédures fondamentales d'essais et de
mesures - Partie 2-43: Essais - Sélection des connecteurs
PC pour fibres optiques unimodales en fonction de leur
affaiblissement de réflexion
(IEC 61300-2-43:2022)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile - Grundlegende Prüf- und Messverfahren - Teil 2-
43: Prüfungen - Verfahren zur Sortierprüfung von
Einmoden-PC-LWL-Steckverbindern in Abhängigkeit von
der Rückflusssdämpfung
(IEC 61300-2-43:2022)

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Comité Européen de Normalisation Electrotechnique
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European foreword

The text of document 86B/4628/FDIS, future edition 3 of IEC 61300-2-43, prepared by SC 86B "Fibre optic interconnecting devices and passive components" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61300-2-43:2022.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-07-06
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IEC 61300-1 NOTE Harmonized as EN IEC 61300-1

IEC 61755-2-1 NOTE Harmonized as EN 61755-2-1

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-43: Tests – Screen testing of return loss of single-mode PC optical fibre connectors**

**Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures –
Partie 2-43: Essais – Sélection des connecteurs PC pour fibres optiques unimodales en fonction de leur affaiblissement de réflexion**



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

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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES
AND PASSIVE COMPONENTS –
BASIC TEST AND MEASUREMENT PROCEDURES –****Part 2-43: Tests – Screen testing of return loss of
single-mode PC optical fibre connectors**

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IEC 61300-2-43 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

This third edition cancels and replaces the second edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: addition of Clause 3 containing terms, definitions, and abbreviated terms.

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

Draft	Report on voting
86B/4628/FDIS	86B/4652/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.

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-43: Tests – Screen testing of return loss of single-mode PC optical fibre connectors

1 Scope

This part of IEC 61300 aims at screening single-mode physical contact (PC) optical fibre connector plugs of an optical fibre patch cord or an optical fibre pigtail in terms of return loss, thus ensuring minimum return loss when the connector plugs are randomly mated with each other in the field. This document is intended to apply to cylindrical ferrule connector plugs.

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 61300-3-6, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – Return loss*

3 Terms, definitions, and abbreviated terms

3.1 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databased for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.2 Abbreviated terms

BD	branching device
D	detector
DUT	device under test
PC	physical contact
PDL	polarization dependent loss
RSC	reflection standard cord
RSP	reflection standard plug
S	source
T	termination
TJ	temporary joint