

This document is a preview generated by EVS

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 EESSÖNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61300-2-43:2014 sisaldb Euroopa standardi EN 61300-2-43:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 61300-2-43:2014 consists of the English text of the European standard EN 61300-2-43:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 12.09.2014.	Date of Availability of the European standard is 12.09.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 33.180.20

Standardite reproduutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

September 2014

ICS 33.180.20

Supersedes EN 61300-2-43:1999

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 61300-2-43:2014)

Dispositifs d'interconnexion et composants passifs à fibres
optiques - 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
(CEI 61300-2-43:2014)

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 Rückflussdämpfung
(IEC 61300-2-43:2014)

This European Standard was approved by CENELEC on 2014-07-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 86B/3669/CDV, future edition 2 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 61300-2-43:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2015-04-24 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2015-07-24 the document have to be withdrawn

This document supersedes EN 61300-2-43:1999.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61300-2-43:2014 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 61300-1 NOTE Harmonized as EN 61300-1.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

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.

NOTE 1 When 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 61300-3-6	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss	EN 61300-3-6	-

CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 General description	5
4 Apparatus	5
5 Procedure	6
5.1 Selection of the reflection standard cord	6
5.2 Cord screen testing	6
5.3 Pigtail cord screen testing	6
6 Details to be specified	7
Annex A (informative) Screen testing of return loss of pigtails having PC fibre optic connector	8
Bibliography	13
 Figure 1 – Measurement set-up for open plug reflection standard	6
Figure 2 – Measurement set-up for mated reflection standard cords	6
Figure 3 – Measurement set-up for cord screen testing	6
Figure 4 – Measurement set-up for pigtail cord screen testing	7
Figure A.1 – Measurement set-up of the screen test method	9
Figure A.2 – Relationship between β and α	10
Figure A.3 – Cumulative probability of return loss before test	11
Figure A.4 – Cumulative probability of return loss after test	11
Figure A.5 – Relationship between power and α	12
Figure A.6 – Measurement set-up of the reflected powers	12