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Standards

Irish Standard  
I.S. EN 61300-2-35:2014

# Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-35: Tests - Cable nutation

**I.S. EN 61300-2-35:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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EUROPEAN STANDARD

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NORME EUROPÉENNE

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English Version

**Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures - Part 2-35: Tests -  
Cable nutation  
(IEC 61300-2-35:2014)**

Dispositifs d'interconnexion et composants passifs à fibres  
optiques - Procédures fondamentales d'essais et de  
mesures - Partie 2-35: Essais - Nutation du câble  
(CEI 61300-2-35:2014)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Grundlegende Prüf- und Messverfahren - Teil 2-  
35: Prüfungen - Kabelnutation  
(IEC 61300-2-35:2014)

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Europäisches Komitee für Elektrotechnische Normung

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

## **Foreword**

The text of document 86B/3703/FDIS, future edition 2 of IEC 61300-2-35, 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 61300-2-35:2014.

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) 2015-01-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-04-11

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

IEC 61753-1      NOTE Harmonized as EN 61753-1.

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61300-3-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	-
IEC 61300-3-3	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss	EN 61300-3-3	-
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-4: Examinations and measurements - Attenuation	EN 61300-3-4	-

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**IEC 61300-2-35**

Edition 2.0 2014-03

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**



**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –  
Part 2-35: Tests – Cable nutation**

**Dispositifs d'interconnexion et composants passifs à fibres optiques –  
Procédures fondamentales d'essais et de mesures –  
Partie 2-35: Essais – Nutation du câble**



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**IEC 61300-2-35**

Edition 2.0 2014-03

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –  
Part 2-35: Tests – Cable nutation**

**Dispositifs d'interconnexion et composants passifs à fibres optiques –  
Procédures fondamentales d'essais et de mesures –  
Partie 2-35: Essais – Nutation du câble**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

#### **Part 2-35: Tests – Cable nutation**

#### FOREWORD

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International Standard IEC 61300-2-35 has been prepared by subcommittee SC86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition, published in 1995, and constitutes a technical revision.

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

- addition of new normative references;
- addition of new terms and definitions;
- addition of two figures for test apparatus: one with horizontal rotation DUT, one with rotating deflection unit;

- severity reconsidered.

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

FDIS	Report on voting
86B/3703/FDIS	86B/3726/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.

The list of all parts of IEC 61300 series, published under the general title, *Fibre optic interconnecting and passive components – Basic test and measurement procedures*, can be found on the IEC website.

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

## **Part 2-35: Tests – Cable nutation**

### **1 Scope**

This part of IEC 61300 details procedures for determining the suitability of a fibre optic device to withstand nutation that may occur during operation, service, storage and/or transport. The test is intended to indicate the performance of such devices when exposed to torsion and bending as a combined load.

### **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 61300-3-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

IEC 61300-3-3, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-3: Examinations and measurements – Active monitoring of changes in attenuation and return loss*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

### **3 Terms and definitions**

For the purposes of this document, the terms and definitions contained in the IEC 61300 series, some of which have been repeated here for convenience, and the following terms and definitions apply.

#### **3.1**

##### **deflection unit**

rotating element with a cable feed through, able to describe a circle without transmitting substantial torque to the cable

#### **3.2**

##### **fixed clamping device**

clamping device which prevents the device under test (DUT) moving during the test

#### **3.3**

##### **fixed plate**

plate with a cable feed through able to constrain any movement and twist of the cable in relation to the DUT

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