

# 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

**FIBRE OPTIC INTERCONNECTING  
DEVICES AND PASSIVE COMPONENTS –  
BASIC TEST AND MEASUREMENT PROCEDURES –****Part 2-35: Tests – Cable nutation**

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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.

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

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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