



IEC 61300-3-21

Edition 3.0 2019-09  
REDLINE VERSION

# INTERNATIONAL STANDARD



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**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –  
Part 3-21: Examinations and measurements – Switching time**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ICS 33.180.20

ISBN 978-2-8322-7436-1

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE  
COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –****Part 3-21: Examinations and measurements – Switching time****FOREWORD**

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International Standard IEC 61300-3-21 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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 changes with respect to the previous edition:

- a) changes to remove redundant overlap with IEC 60876-1;
- b) clarifications to definitions and diagrams;
- c) generalization of the detection apparatus beyond an oscilloscope.

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

FDIS	Report on voting
86B/4218/FDIS	86B/4230/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61300 series, published under the general title, *Fibre optic interconnecting devices 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 3-21: Examinations and measurements – Switching time

#### 1 Scope

This part of IEC 61300-~~is~~ describes a method to measure the switching time and related performance parameters of ~~an optical~~ a fibre optic spatial switch when the actuation energy is applied or removed to change the state of the switch.

#### 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 61300-1, Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance~~

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

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –**

**Part 3-21: Examinations and measurements – Switching time**

**Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures –**

**Partie 3-21: Examens et mesures – Temps de commutation**



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COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –****Part 3-21: Examinations and measurements – Switching time****FOREWORD**

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### Part 3-21: Examinations and measurements – Switching time

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#### 2 Normative references

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

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## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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### **DISPOSITIFS D'INTERCONNEXION ET COMPOSANTS PASSIFS FIBRONIQUES – PROCÉDURES FONDAMENTALES D'ESSAIS ET DE MESURES –**

#### **Partie 3-21: Examens et mesures – Temps de commutation**

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La Norme internationale IEC 61300-3-21 a été établie par le sous-comité 86B: Dispositifs d'interconnexion et composants passifs à fibres optiques, du comité d'études 86 de l'IEC: Fibres optiques.

Cette troisième édition annule et remplace la deuxième édition parue en 2014 dont elle constitue une révision technique.

La présente édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) modifications pour éviter les redondances avec l'IEC 60876-1;
- b) clarifications des définitions et des schémas;

c) généralisation des appareils de détection autres que les oscilloscopes.

Le texte de cette Norme internationale est issu des documents suivants:

FDIS	Rapport de vote
86B/4218/FDIS	86B/4230/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Une liste de toutes les parties de la série de normes IEC 61300, publiées sous le titre général, *Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures*, est disponible sur site web de l'IEC.

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**DISPOSITIFS D'INTERCONNEXION ET COMPOSANTS PASSIFS  
FIBRONIQUES – PROCÉDURES FONDAMENTALES  
D'ESSAIS ET DE MESURES –**

**Partie 3-21: Examens et mesures – Temps de commutation**

## **1 Domaine d'application**

La présente partie de l'IEC 61300 décrit une méthode en vue de mesurer le temps de commutation et les paramètres de performances associés d'un commutateur spatial fibronique, lorsque l'énergie d'activation est appliquée ou retirée pour modifier l'état du commutateur.

## **2 Références normatives**

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61300-3-4, *Dispositifs d'interconnexion et composants passifs à fibres optiques – Méthodes fondamentales d'essais et de mesures – Partie 3-4: Examens et mesures – Affaiblissement*