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colour inside

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-14: Tests – High optical power

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

Part 2-14: Tests – High optical power

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International Standard IEC 61300-2-14 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This fourth edition cancels and replaces the third edition published in 2012. This edition constitutes a technical revision.

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

a) harmonizing IEC 61300-1:2016 and IEC 61300-3-4:2012;

b) addition of abbreviated terms;

c) addition of Clause A.2 regarding input optical power from both ends.

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

CDV	Report on voting
86B/4299/CDV	86B/4362A/RVC

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 2-14: Tests – High optical power

1 Scope

This part of IEC 61300 describes a procedure for determining the suitability of a fibre optic interconnecting device or a passive component to withstand ~~the~~ exposure to the optical power which ~~may occur~~ occurs during its operation.

~~NOTE General information and guidance concerning relevant test and measurement procedures is contained in IEC 61300-1.~~

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 60825-1, *Safety of laser products – Part 1: Equipment classification and requirements*

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

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 61300-3-35, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-35: Examinations and measurements – ~~Fibre optic connector endface visual and automated inspection~~ Visual inspection of fibre optic connectors and fibre-stub transceivers*

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-14: Tests – High optical power

Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures –
Partie 2-14: Essais – Puissance optique élevée



IEC 61300-2-14:2021-02(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-14: Tests – High optical power

FOREWORD

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

Part 2-14: Tests – High optical power

1 Scope

This part of IEC 61300 describes a procedure for determining the suitability of a fibre optic interconnecting device or a passive component to withstand exposure to the optical power which occurs during its operation.

2 Normative references

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

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 61300-3-35, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-35: Examinations and measurements – Visual inspection of fibre optic connectors and fibre-stub transceivers*

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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 2-14: Essais – Puissance optique élevée

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Cette quatrième édition annule et remplace la troisième édition parue en 2012. Cette édition constitue une révision technique.

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

a) harmonisation de l’IEC 61300-1:2016 et de l’IEC 61300-3-4:2012;
b) ajout de termes abrégés;

c) ajout de l’Article A.2 relatif à la puissance optique d’entrée des deux extrémités.

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

CDV	Rapport de vote
86B/4299/CDV	86B/4362A/RVC

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 IEC 61300, publiées sous le titre général *Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures*, est disponible sur le site web de l'IEC.

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

Partie 2-14: Essais – Puissance optique élevée

1 Domaine d’application

La présente partie de l’IEC 61300 décrit une méthode en vue de déterminer l'aptitude d'un dispositif d'interconnexion ou d'un composant passif fibronique à résister à l'exposition à une puissance optique susceptible d'apparaître au cours du fonctionnement.

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 60825-1, *Sécurité des appareils à laser – Partie 1: Classification des matériels et exigences*

IEC 61300-1, *Dispositifs d’interconnexion et composants passifs fibroniques – Procédures fondamentales d’essais et de mesures – Partie 1: Généralités et lignes directrices*

IEC 61300-3-1, *Dispositifs d’interconnexion et composants passifs à fibres optiques – Méthodes fondamentales d’essais et de mesures – Partie 3-1: Examens et mesures – Examen visuel*

IEC 61300-3-3, *Dispositifs d'interconnexion et composants passifs à fibres optiques – Méthodes fondamentales d'essais et de mesures – Partie 3-3: Examens et mesures – Contrôle actif des variations de l'affaiblissement et de l'affaiblissement de réflexion*

IEC 61300-3-35, *Dispositifs d’interconnexion et composants passifs à fibres optiques – Procédures fondamentales d’essais et de mesures – Partie 3-35: Examens et mesures – Examen visuel des connecteurs à fibres optiques et des émetteurs-récepteurs à embase fibrée*