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INTERNATIONAL STANDARD

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 3-14: Examinations and measurements – Error and repeatability of the attenuation settings of a variable optical attenuator**

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Part 3-14: Examinations and measurements – Error and repeatability of the attenuation settings of a variable optical attenuator

FOREWORD

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International Standard IEC 61300-3-14 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 2006 and constitutes a technical revision

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

- a) title modification replacing the word "accuracy" by "error";
- b) inclusion of the distinction of manually and electrically controlled variable optical attenuators in the Scope;

- c) revision of clauses for apparatus and details to be specified to harmonize with other standards in the IEC 61300 series;
- d) addition of “the maximum deviation of attenuation from setting” to the clause for calculation;
- e) addition of “measurement method of hysteresis characteristics” in Annex B.

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

| FDIS | Report on voting |
|---------------|------------------|
| 86B/3816/FDIS | 86B/3843/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.

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.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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

Part 3-14: Examinations and measurements – Error and repeatability of the attenuation settings of a variable optical attenuator

1 Scope

This part of IEC 61300 provides a method to measure the error and repeatability of the attenuation value settings of a variable optical attenuator (VOA). There are two control technologies for VOAs, manually controlled and electrically controlled. This standard covers both control technologies of VOAs and also covers both single-mode and multimode fibre VOAs.

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 61300-1, *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*