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Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -
Part 3-50: Examinations and measurements - Crosstalk for optical spatial switches

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FOREWORD

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IEC 61300-3-50 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

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

a) revising structure of the document.

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

Draft	Report on voting
86B/5129/FDIS	86B/5166/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,

– withdrawn, or

– revised.

1 Scope

This part of IEC 61300 describes the procedure to measure the crosstalk of optical signals between the ports of a multiport $M \times N$ (M input ports and N output ports) fibre optic spatial switch. ~~The crosstalk is defined as the ratio of the optical power at an output port which comes from the unconnected input port, to the optical power at the output port which comes from the connected input port.~~

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 60876-1, *Fibre optic interconnecting devices and passive components - Fibre optic spatial switches - Part 1: Generic specification*

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

IEC 61300-3-2, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-2: Examinations and measurements - Polarization dependent loss in a single-mode fibre optic device*

IEC TS 62627-09, *Fibre optic interconnecting devices and passive components - Vocabulary for passive optical devices*

Bibliography

[1] IEC 62074-1, *Fibre optic interconnecting devices and passive components - Fibre optic WDM devices - Part 1: Generic specification*

[2] IEC 61300-3-29, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-29: Examinations and measurements ~~— Measurement techniques for characterizing the amplitude of the Spectral transfer function of DWDM components~~[2] - Spectral transfer characteristics of DWDM* devices

~~Additional non-cited references~~

~~IEC 60876-1, *Fibre optic interconnecting devices and passive components – Fibre optic spatial switches – Part 1: Generic specification*~~

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[2] ~~A second edition of IEC 61300-3-29 is due to be published shortly.~~