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Date: 17 June 2022

Origin: International

Latest date for receipt of comments: 12 July 2022

Project No. 2022/00955

Responsible committee: GEL/86/2 Fibre optic interconnecting devices and passive components

Interested committees:

Title: BS IEC 61300-3-3 Ed4 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

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



86B/4619/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:
IEC 61300-3-3 ED4

DATE OF CIRCULATION:
2022-05-20

CLOSING DATE FOR COMMENTS:
2022-08-12

SUPERSEDES DOCUMENTS:
86B/4618/RR

IEC SC 86B : FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS	
SECRETARIAT: Japan	SECRETARY: Mr Shigeru Tomita
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.
FUNCTIONS CONCERNED: ☐ EMC ☐ ENVIRONMENT ☐ QUALITY ASSURANCE ☐ SAFETY	

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

TITLE:

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

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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International Standard IEC 61300-3-3 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 2009. This edition constitutes a minor revision.

The changes with respect to the previous edition include revision of the requirements for the light source, launching condition, detector and temporary joint for harmonizing with IEC 61300-3-4 and 61300-3-6, as well as revision of normative references.

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

FDIS	Report on voting
86B/xxxxFDIS	86B/xxxxRVD

129
130 Full information on the voting for the approval of this standard can be found in the report on
131 voting indicated in the above table.

132 The French version of this standard has not been voted upon.

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

134 A list of all parts of IEC 61300 series, published under the general title *Fibre optic*
135 *interconnecting devices and passive components – Basic test and measurement procedures*,
136 can be found on the IEC website.

137 The committee has decided that the contents of this publication will remain unchanged until the
138 maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data
139 related to the specific publication. At this date, the publication will be

- 140 • reconfirmed,
141 • withdrawn,
142 • replaced by a revised edition, or
143 • amended.

144

145

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

1 Scope

This part of IEC 61300 describes the procedure to monitor changes in attenuation and/or return loss of a component, an interconnecting device, a fibre management system, or a protective housing, when subjected to an environmental or mechanical test. Such a procedure is commonly referred to as active monitoring.

The procedure can be applied to measurements on single samples or to simultaneous measurements on multiple samples, both at single wavelengths and multiple wavelengths, by using branching devices and/or switches as appropriate.

2 Normative references

The following referenced documents are indispensable for the application 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 61280-1-3, *Fibre optic communication subsystem test procedures – Part 1-3: General communication subsystems – Measurement of central wavelength, spectral width and additional spectral characteristics*

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 61300-3-2, *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 61300-3-6, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – 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*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions are given in IEC 60050-731 and IEC 61300-1.