

Irish Standard I.S. EN 61753-089-2:2013

Fibre optic interconnecting devices and passive components - Performance standard -- Part 089-2: Non-connectorized single-mode bidirectional OTDR monitoring WWDM devices for category C - Controlled environment (IEC 61753-089-2:2013 (EQV))

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**EUROPEAN STANDARD** 

EN 61753-089-2

NORME EUROPÉENNE EUROPÄISCHE NORM

June 2013

ICS 33.180.20

**English version** 

Fibre optic interconnecting devices and passive components - Performance standard -

Part 089-2: Non-connectorized single-mode bidirectional OTDR monitoring WWDM devices for category C - Controlled environment

(IEC 61753-089-2:2013)

Dispositifs d'interconnexion et composants passifs à fibres optiques Norme de performance Partie 089-2: Dispositifs WWDM de surveillance par OTDR, unimodaux non connectorisés bidirectionnels pour la catégorie C - Environnement contrôlé (CEI 61753-089-2:2013)

Lichtwellenleiter Verbindungselemente und passive
Bauteile Betriebsverhalten Teil 089-2: Nicht mit Steckverbindern
versehene bidirektionale OTDRÜberwachungs-WWDM-Bauteile für die
Kategorie C kontrollierte Umgebung
(IEC 61753-089-2:2013)

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Management Centre: Avenue Marnix 17, B - 1000 Brussels

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#### **Foreword**

The text of document 86B/3454/CDV, future edition 1 of IEC 61753-089-2, prepared by SC 86B "Fibre optic interconnecting devices and passive components" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61753-089-2:2013.

The following dates are fixed:

latest date by which the document has	(dop)	2014-01-10
to be implemented at national level by		
publication of an identical national		
standard or by endorsement		
latest date by which the national	(dow)	2016-04-10
standards conflicting with the		
document have to be withdrawn		
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#### **Endorsement notice**

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#### Annex ZA

(normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 61300-2-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal)	EN 61300-2-1	-
IEC 61300-2-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre/cable retention	EN 61300-2-4	-
IEC 61300-2-9	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock	EN 61300-2-9	-
IEC 61300-2-14	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-14: Tests - High optical power	EN 61300-2-14	-
IEC 61300-2-17	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-17: Tests - Cold	EN 61300-2-17	-
IEC 61300-2-18	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-18: Tests - Dry heat - High temperature endurance	EN 61300-2-18	-
IEC 61300-2-19	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-19: Tests - Damp heat (steady state)	EN 61300-2-19	-
IEC 61300-2-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature	EN 61300-2-22	-
IEC 61300-2-42	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for connectors	EN 61300-2-42	-

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 61300-2-44	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-44: Tests - Flexing of the strain relief of fibre optic devices	EN 61300-2-44	-
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	EN 61300-3-6	-
IEC 61300-3-7	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-7: Examinations and measurements - Wavelength dependence of attenuation and return loss of single mode components	EN 61300-3-7	-
IEC 61300-3-20	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-20: Examinations and measurements - Directivity of fibre optic branching devices	EN 61300-3-20	-
IEC 61753-1	2007	Fibre optic interconnecting devices and passive components performance standard Part 1: General and guidance for performance standards	EN 61753-1 -	2007

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

### Part 089-2: Non-connectorized single-mode bidirectional OTDR monitoring WWDM devices for category C – Controlled environment

#### **FOREWORD**

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International Standard IEC 61753-089-2 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components of IEC technical committee 86: Fibre optics.

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

CDV	Report on voting
86B/3454/CDV	86B/3529/RVC

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.

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A list of all parts of IEC 61753 series, under the general title *Fibre optic interconnecting devices and passive components – Performance standard*, 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.

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# FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

## Part 089-2: Non-connectorized single-mode bidirectional OTDR monitoring WWDM devices for category C – Controlled environment

#### 1 Scope

This part of IEC 61753 contains the minimum initial performance, test and measurement requirements and severities which a fibre optic pigtailed wide wavelength division multiplexing (WWDM) device for monitoring passive optical networks (PON) using an optical time-domain reflectometer (OTDR) satisfies in order to be categorized as meeting the requirements of category C (controlled environments), as defined in Annex A of IEC 61753-1:2007.

Annex B of this standard provides information concerning the principle and function of the OTDR monitoring WWDM.

#### 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 61300-2-1, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-1: Tests Vibration (sinusoidal)
- IEC 61300-2-4, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-4: Tests Fibre/cable retention
- IEC 61300-2-9, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-9: Tests Shock
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- IEC 61300-2-17, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-17: Tests Cold
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- IEC 61300-2-19, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-19: Tests Damp heat (steady state)
- IEC 61300-2-22, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-22: Tests Change of temperature
- IEC 61300-2-42, Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-42: Tests Static side load for connectors



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