

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Performance standard –**

**Part 087-6: Non-connectorised single-mode bidirectional 1 310 nm upstream and 1 490 nm downstream WWDM devices for category O – Uncontrolled environment**

**Dispositifs d'interconnexion et composants passifs à fibres optiques – Norme de qualité de fonctionnement –**

**Partie 087-6: Dispositifs WWDM unimodaux non-connectorisés bidirectionnels 1 310 nm en voie montante et 1 490 nm en voie descendante, pour la catégorie O – Environnement non contrôlé**





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## CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references .....	5
3 Test.....	6
4 Test report.....	6
5 Performance requirements .....	6
5.1 Reference components.....	6
5.2 Dimensions .....	7
5.3 Sample size, sequencing and grouping .....	7
5.4 Test Details and Requirements.....	7
Annex A (normative) Sample size, sequencing and grouping .....	12
Annex B (informative) General information for 1 310 nm upstream and 1 490 nm downstream PON WWDM device .....	13
Bibliography.....	14
Figure B.1 – Example for 1490 nm downstream and 1310 nm upstream WWDM at central office and customer side .....	13
Table 1 – Test details and requirements .....	7
Table A.1 – Sample size and sequencing of tests .....	12

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 087-6: Non-connectorised single-mode  
bidirectional 1 310 nm upstream and  
1 490 nm downstream WDM devices for category O –  
Uncontrolled environment**

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International Standard IEC 61753-087-6 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/3256/CDV	86B/3328/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.

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.

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

## Part 087-6: Non-connectorised single-mode bidirectional 1 310 nm upstream and 1 490 nm downstream WWDM devices for category O – Uncontrolled environment

### 1 Scope

This part of IEC 61753 contains the minimum initial performance, test and measurement requirements and severities which a fibre optic pigtailed 1 310 nm upstream and 1 490 nm downstream wide wavelength division multiplexing (WWDM) passive optical network (PON) device must satisfy in order to be categorized as meeting the requirements of category O (uncontrolled environments), as defined in Annex A of IEC 61753-1.

Annex B of this standard provides information concerning the function of the 1 310 nm upstream and 1 490 nm downstream 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 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

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 61300-2-5, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-5: Tests – Torsion*

IEC 61300-2-9, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-9: Tests – Shock*

IEC 61300-2-14, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-14: Tests – Optical power handling and damage threshold characterization*

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*