

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Fibre optic interconnecting devices and passive components – Non-wavelength-selective fibre optic branching devices –  
Part 1: Generic specification**

**Dispositifs d'interconnexion et composants passifs à fibres optiques –  
Dispositifs de couplage à fibres optiques ne dépendant pas de la longueur  
d'onde –  
Partie 1: Spécification générique**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 33.180.20

ISBN 978-2-8322-2663-6

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE  
COMPONENTS – NON-WAVELENGTH-SELECTIVE  
FIBRE OPTIC BRANCHING DEVICES –****Part 1: Generic specification**

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International Standard IEC 60875-1 has been prepared by subcommittee SC86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This sixth edition cancels and replaces the fifth edition published in 2010 and constitutes a technical revision.

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

- a) removal of terms and definitions for splitter, coupler, symmetric non-wavelength-selective branching device, asymmetric non-wavelength-selective branching device;
- b) addition of terms and definitions for bidirectional non-wavelength-selective branching device and non-bidirectional non-wavelength-selective branching device
- c) removal of assessment level.

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

CDV	Report on voting
86B/3806/CDV	86B/3872/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 in the IEC 60875 series, published under the general title *Fibre optic interconnecting devices and passive components – Non-wavelength-selective fibre optic branching devices*, 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 website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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# FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – NON-WAVELENGTH-SELECTIVE FIBRE OPTIC BRANCHING DEVICES –

## Part 1: Generic specification

### 1 Scope

This part of IEC 60875 applies to non-wavelength-selective fibre optic branching devices exhibiting the following features:

- they are passive, in that they contain no optoelectronic or other transducing elements,
- they have three or more ports for the entry and/or exit of optical power, and share optical power among these ports in a predetermined fashion;
- the ports are optical fibres, or optical fibre connectors.

This standard establishes uniform requirements for the optical, mechanical and environmental properties.

### 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 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050 (all parts), *International Electrotechnical Vocabulary* (available at <http://www.electropedia.org/>)

IEC 60617 (all parts), *Graphical symbols for diagrams* (available at <http://std.iec.ch/iec60617>)

IEC 60695-11-5, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 60825 (all parts), *Safety of laser products*

IEC 61300 (all parts), *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*

IEC TR 61930, *Fibre optic graphical symbology*

ISO 129-1, *Technical drawings – Indication of dimensions and tolerances – Part 1: General principles*

ISO 286-1, *Geometrical product specifications (GPS) – ISO code system for tolerances on linear sizes – Part 1: Basis of tolerances, deviations and fits*

ISO 1101, *Geometrical product specifications (GPS) – Geometrical tolerancing – Tolerances of form, orientation, location and run-out*