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Irish Standard
I.S. EN 62074-1:2014

Fibre optic interconnecting devices and passive components - Fibre optic WDM devices -- Part 1: Generic specification

I.S. EN 62074-1:2014

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English version

**Fibre optic interconnecting devices and passive components -
Fibre optic WDM devices -
Part 1: Generic specification
(IEC 62074-1:2014)**

Dispositifs d'interconnexion et dispositifs
passifs à fibres optiques -
Dispositifs WDM à fibres optiques -
Partie 1: Spécification générique
(CEI 62074-1:2014)

Lichtwellenleiter -
Verbindungselemente und passive
Bauteile -
Lichtwellenleiter-WDM-Bauteile -
Teil 1: Fachgrundspezifikation
(IEC 62074-1:2014)

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/3700/FDIS, future edition 2 of IEC 62074-1, 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 62074-1:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-12-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-03-13

This document supersedes EN 62074-1:2009.

EN 62074-1:2014 includes the following significant technical changes with respect to EN 62074-1:2009:

- substantial updating to the definitions;
- the addition of informative Annexes C to G, giving examples of technical information concerning WDM devices.

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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>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	series	Letter symbols to be used in electrical technology	EN 60027	series
IEC 60050-731	-	International Electrotechnical Vocabulary (IEV) Chapter 731: Optical fibre communication	-	-
IEC 60695-11-5	-	Fire hazard testing Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	-
IEC 60825-1	-	Safety of laser products Part 1: Equipment classification and requirements	EN 60825-1	-
IEC/TR 61931	-	Fibre optic - Terminology	-	-
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	EN ISO 286-1	-
ISO 1101	-	Geometrical product specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out	EN ISO 1101	-
ISO 8601	-	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-

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IEC 62074-1

Edition 2.0 2014-02

INTERNATIONAL STANDARD



**Fibre optic interconnecting devices and passive components – Fibre optic
WDM devices –
Part 1: Generic specification**



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IEC 62074-1

Edition 2.0 2014-02

INTERNATIONAL STANDARD



**Fibre optic interconnecting devices and passive components – Fibre optic
WDM devices –
Part 1: Generic specification**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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ICS 33.180.01, 33.180.20

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC WDM DEVICES –

Part 1: Generic specification

FOREWORD

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International Standard IEC 62074-1 has been prepared by subcommittee SC 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition, published in 2009, and constitutes a technical revision.

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

- a) substantial updating to the definitions;
- b) the addition of informative Annexes C to G, giving examples of technical information concerning WDM devices.

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

FDIS	Report on voting
86B/3700/FDIS	86B/3722/RVD

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 62074 series, published under the general title *Fibre optic interconnecting devices and passive components – Fibre optic wdm 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 web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC WDM DEVICES –

Part 1: Generic specification

1 Scope

This part of IEC 62074 applies to fibre optic wavelength division multiplexing (WDM) devices. These have all of the following general features:

- they are passive, in that they contain no optoelectronic or other transducing elements; however they may use temperature control only to stabilize the device characteristics; they exclude any optical switching functions;
- 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 depending on the wavelength;
- the ports are optical fibres, or optical fibre connectors.

This standard establishes uniform requirements for the following:

- 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 60050-731, *International Electrotechnical Vocabulary – Chapter 731: Optical fibre communication*

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

IEC 60825-1, *Safety of laser products – Part 1: Equipment classification and requirements*

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