

Passive components to be used in optical fibre communication systems — Product specifications —

Part 3-1: Type: 100/200 GHz DWDM module terminated on IEC 60793-2-50 category B1.1 and B1.3 single mode fibre

The European Standard EN 50378-3-1:2007 has the status of a British Standard

ICS 33.180.20

National foreword

This British Standard is the UK implementation of EN 50378-3-1:2007.

The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/2, Fibre optic interconnecting devices and passive components.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

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Product specifications -**

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category B1.1 and B1.3 single mode fibre**

Composants passifs destinés
à être utilisés dans les systèmes
de communication par fibres optiques -
Spécifications de produit -
Partie 3-1: Type: module DWDM
100/200 GHz câblé sur fibre unimodale
des catégories B1.1 et B1.3
de la CEI 60793-2-50

Passive Bauteile für Lichtwellenleiter-
Datenübertragungssysteme -
Produktnormen -
Teil 3-1: Bauart 100/200 GHz-DWDM-
Modul zum Anschluss an Einmodenfasern
der Typen B1.1 und B1.3 nach
IEC 60793-2-50

This European Standard was approved by CENELEC on 2007-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

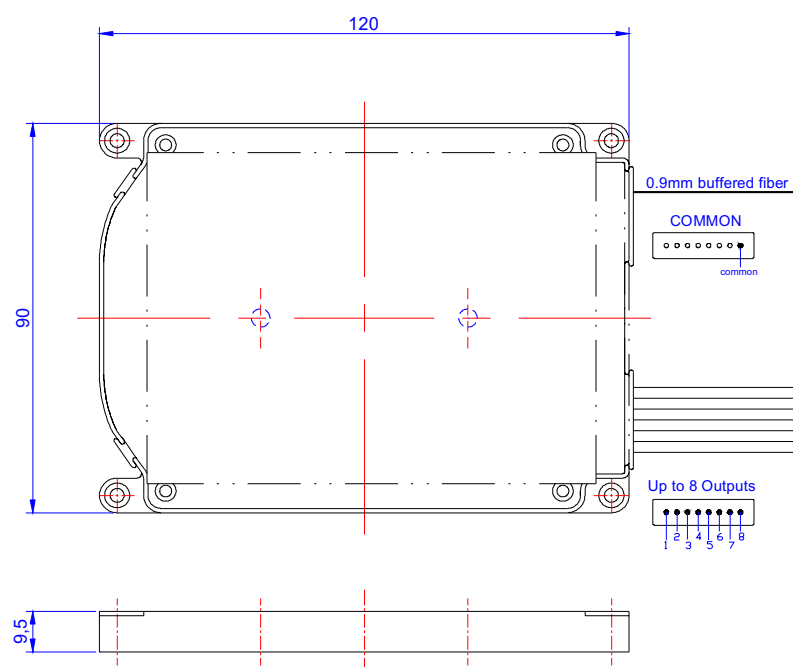
This European Standard was prepared by the Technical Committee CENELEC TC 86BXA, Fibre optic interconnect, passive and connectorised components.

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The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
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 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2010-04-01
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Passive components to be used in optical fibre communication systems - Product specifications				
Part 3-1: Type: 100/200 GHz DWDM module terminated on IEC 60793-2-50 category B1.1 and B1.3 single mode fibre				
Description		Performance		
Type:	100 / 200 GHz DWDM module	Application:	For use in controlled environment EN 61753-1 Category C	
Configuration:	pigtailed module	Mux/Demux:		
Fibre Category:	EN 60793-2-50 Type B1.1 and B1.3	Attenuation Grade	100 GHz / 200 GHz	
		Grade S	n x 0,5 + 0,8 dB	
		Grade P	n x 0,5 + 0,5 dB n = number of channels	
Cable Type:	900 µm buffered fibre	Isolation	Mux :	Demux:
			100 GHz 200 GHz	100 GHz 200 GHz
		Adjacent channels	10 dB 12 dB	25 dB 30 dB
		NonAdj. channels	10 dB 12 dB	30 dB 35 dB
		Return Loss:		
		Grade 3	≥ 35 dB	
Related documents:				
EN 50377 series		Connector sets and interconnect components to be used in optical fibre communication systems - Product specifications		
EN 60794-2		Optical fibre cables - Part 2: Indoor cables - Sectional specification (IEC 60794-2)		
EN 61300 series		Fibre optic interconnecting devices and passive components - Basic test and measurement procedures (IEC 61300 series)		
EN 61753-1		Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standard (IEC 61753-1)		
IEC/PAS 62074-1		Fibre Optic WDM devices - Part 1: Generic specification		
ETSI ES 201 791		Transmission and Multiplexing (TM) - Dense Wavelength Division Multiplexing devices - Common requirements and conformance testing		
ETSI EN 300 019-1-4		Environmental Engineering (EE) - Environmental conditions and environmental tests for telecommunications equipment - Part 1-4: Classification of environmental conditions - Stationary use at non-weatherprotected locations		
ITU Recommendation G 671		Transmission characteristics of optical components and subsystems		



Outline and maximum dimensions

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1 Scope

1.1 Product definition

This specification contains the initial, start of life dimensional, optical, mechanical and environmental requirements a unconnectorised or connectorised 100/200 GHz DWDM module has to fulfill in order to be characterised as an EN standard product.

Since different variants are permitted, product-marking details are given in 2.5.

The wavelength grid shall be according ITU Recommendation G 671 (see Annex B).

1.2 Interchangeability

Environmental performance requirements which DWDM module terminated on single mode fibre B1.1 without connectors shall meet in order to be categorised as an EN standard product. The module is to be placed in an enclosure to protect it from accidental pulling forces. All products conforming to the requirements of this specification which meet the transmission and dimensional requirements will be interchangeable. This will be ensured independently of the manufacturing source(s) of the modules.

1.3 Operating environment

The tests selected combined with the severities and durations are representative of a controlled environment typically, but not limited to, that defined as in EN 61753-051-3 and IEC Category C.

1.4 Reliability

Whilst the anticipated service life expectancy of the product in this environment is 20 years, compliance with this specification does not guarantee the reliability of the product. This should be predicted using a recognised reliability assessment programme.

1.5 Quality assurance

Compliance with this specification does not guarantee the manufacturing consistency of the product. This should be maintained using a recognised quality assurance programme.

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.

EN 50377 series	Connector sets and interconnect components to be used in optical fibre communication systems - Product specifications
EN 61300 series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures (IEC 61300 series)
EN 61753-051-3	Fibre optic interconnecting devices and passive components performance standard - Part 051-3: Single-mode fibre, plug-style fixed attenuators for category U - Uncontrolled environment (IEC 61753-051-3)
ITU Recommendation G 671	Transmission characteristics of optical components and subsystems