

# Fibre optic interconnecting devices and passive components — Interface standard for fibre management systems —

## Part 1: General and guidance

The European Standard EN 61756-1:2006 has the status of a British Standard

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# National foreword

This British Standard is the official English language version of EN 61756-1:2006. It is identical with IEC 61756-1:2006.

The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/2, Interconnecting devices and passive components, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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## Summary of pages

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**Fibre optic interconnecting devices and passive components -  
Interface standard for fibre management systems  
Part 1: General and guidance  
(IEC 61756-1:2006)**

Dispositifs d'interconnexion et  
composants passifs à fibres optiques -  
Norme d'interface pour les systèmes de  
gestion de fibres  
Partie 1: Généralités et lignes directrices  
(CEI 61756-1:2006)

Lichtwellenleiter Verbindungselemente  
und passive Bauteile -  
Schnittstellennorm für  
Einzelfasermanagementsysteme  
Teil 1: Allgemeines und Leitfaden  
(IEC 61756-1:2006)

This European Standard was approved by CENELEC on 2006-06-01. 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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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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

The text of document 86B/2283/FDIS, future edition 1 of IEC 61756-1, 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 was approved by CENELEC as EN 61756-1 on 2006-06-01.

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) 2009-06-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61756-1:2006 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

|             |                                                    |
|-------------|----------------------------------------------------|
| IEC 60794-2 | NOTE Harmonized as EN 60794-2:2003 (not modified). |
| IEC 60794-3 | NOTE Harmonized as EN 60794-3:2002 (not modified). |
| IEC 62134-1 | NOTE Harmonized as EN 62134-1:2002 (not modified). |

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# **FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – INTERFACE STANDARD FOR FIBRE MANAGEMENT SYSTEMS –**

## **Part 1: General and guidance**

### **1 Scope**

This part of IEC 61756 covers general information on the subject of fibre management system (FMS) interfaces. It includes references, document structure details, definitions and the rules under which a FMS interface is created.

This interface standard defines a fibre management system which is part of an optical network. It provides facilities for the direct exchange of optical signals between the incoming and outgoing fibre optic cables. In order to comply with the standard, the optical functionality, physical, geometrical and mechanical requirements shall be met.

These facilities comprise functional and installation aspects for fibres or ribbons like storage, fibre routing, identification, interconnection, reconfiguration, application of passive and active components, protection and traceability.

The fibre management system allows different degrees of physical separation of optical circuits. This is in order to reduce the risk of disturbing other circuits that do not belong to the same group as the ones that are to be manipulated.

Depending on the grouping, guiding and splicing of the fibres from incoming and outgoing cables, the fibre management system can be a single circuit, a single element or a multiple element management system. Single circuit management describes a management system where one or more fibres of a cable element are spliced and/or stored in individual trays. Single element management describes a management system where all fibres of a cable element are spliced and/or stored in individual trays. Multiple element management describes a management system where fibres from more than one cable element are spliced and/or stored in individual trays.

The fibre management system shall be independent from one specific application or housing. It is designed in a way to allow the use for several applications in different housings, e.g. a single circuit management system can be used in a closure, enclosure and open rack.

This specification is related to both singlemode and multimode fibres.

To fulfil the mentioned functions, a fibre management system is normally integrated in an enclosure, e.g. a closure, case or cabinet or it is part of an open access system like an optical distribution frame or rack.