
Garnitura optičnih vlaken – 1. del: Splošne specifikacije (IEC 61134-1:2002)*

Fibre optic enclosures - Part 1: Generic specification (IEC 61134-1:2002)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 62134-1:2004](https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004)

<https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62134-1:2004

<https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004>

EUROPEAN STANDARD

EN 62134-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2002

ICS 33.180.99

English version

Fibre optic enclosures
Part 1: Generic specification
(IEC 62134-1:2002)

Enveloppes pour fibres optiques
Partie 1: Spécification générique
(CEI 62134-1:2002)

Lichtwellenleiternormen
Teil 1: Fachgrundspezifikation
(IEC 62134-1:2002)

iTeh STANDARD PREVIEW

(standards.iteh.ai)

This European Standard was approved by CENELEC on 2002-05-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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/1642/FDIS, future edition 1 of IEC 62134-1, 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 62134-1 on 2002-05-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2003-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2005-05-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62134-1:2002 was approved by CENELEC as a European Standard without any modification.

STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62134-1:2004
<https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004>

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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>
IECQ 001001	- ¹⁾	IEC Quality Assessment System for Electronic Components (IECQ) - Basic Rules	-	-
IECQ 001002-2	1998	IEC Quality Assessment System for Electronic Components (IECQ) - Rules of Procedure Part 2: Documentation	-	-
IECQ 001002-3	1998	Part 3: Approval procedures	-	-
IEC Guide 102	- ¹⁾	Electronic components - Specification structures for quality assessment (Qualification approval and capability approval)	-	-
IEC 60027	Series	Letter symbols to be used in electrical technology	HD 245	Series
IEC 60050-731	- ¹⁾	International Electrotechnical Vocabulary (IEV) Chapter 731: Optical fibre communication	-	-
IEC 60410	- ¹⁾	Sampling plans and procedures for inspection by attributes	-	-
IEC 60617	Series	Graphical symbols for diagrams	EN 60617	Series
IEC 60695-2-2	- ¹⁾	Fire hazard testing Part 2: Test methods - Section 2: Needle-flame test	EN 60695-2-2	1994 ²⁾
IEC 60793-2	- ¹⁾	Optical fibres Part 2: Product specifications	-	-

1) Undated reference.

2) Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60794-2	- ¹⁾	Optical fibre cables Part 2: Product specifications	-	-
IEC 60825-1	- ¹⁾	Safety of laser products Part 1: Equipment classification, requirements and user's guide	EN 60825-1 + corr. February + A11 + corr. July	1994 ²⁾ 1995 1996 1997
IEC 61073-1	- ¹⁾	Mechanical splices and fusion splice protectors for optical fibres and cables Part 1: Generic specification	EN 61073-1	2000 ²⁾
IEC 61300-2	Series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 2: Tests	EN 61300-2	Series
IEC 61300-2-16	- ¹⁾	Part 2-16: Tests - Mould growth	EN 61300-2-16	1997 ²⁾
IEC 61300-2-30	- ¹⁾	Part 2-30: Tests - Solar radiation	EN 61300-2-30	1997 ²⁾
IEC 61300-2-36	- ¹⁾	Part 2-36: Tests - Flammability (fire hazard)	EN 61300-2-36	1997 ²⁾
IEC 61300-3	Series	Part 3: Examinations and measurements	EN 61300-3	Series
IEC 61753-1-1	- ¹⁾	Fibre optic interconnecting devices and passive components - performance standard Part 1-1: General and guidance - Interconnecting devices (connectors)	EN 61753-1-1	2001 ²⁾
IEC/TR3 61930	- ¹⁾	Fibre optic graphical symbology	-	-
ISO 129	- ¹⁾	Technical drawings - Dimensioning - General principles, definitions, methods of execution and special indications	-	-
ISO 286-1	- ¹⁾	ISO system of limits and fits Part 1: Bases of tolerances, deviations and fits	-	-
ISO 370	- ¹⁾	Toleranced dimensions - Conversion from inches into millimetres and vice versa	-	-
ISO 1101	- ¹⁾	Technical drawings - Geometrical tolerancing - Tolerancing of form, orientation, location and run-out - Generalities, definitions, symbols, indications on drawings	-	-

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

62134-1

Première édition
First edition
2002-03

Enveloppes pour fibres optiques –

**Partie 1:
Spécification générique**

iTeh STANDARD PREVIEW
Fibre optic enclosures –
(standards.iteh.ai)

**Part 1:
Generic specification**

<https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004>

© IEC 2002 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembe, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

U

*Pour prix, voir catalogue en vigueur
For price, see current catalogue*

CONTENTS

FOREWORD.....	7
INTRODUCTION.....	9
1 General.....	11
1.1 Scope.....	11
1.2 Normative references	11
1.3 Definitions	15
2 Requirements.....	17
2.1 Classification.....	17
2.1.1 Type.....	19
2.1.2 Style.....	19
2.1.3 Variant.....	21
2.1.4 Arrangement.....	21
2.1.5 Normative reference extensions	21
2.1.6 Environmental category – Recommended service categories.....	23
2.1.7 Assessment level.....	25
2.2 Documentation	27
2.2.1 Specification system.....	27
2.2.2 Symbols	31
2.2.3 Drawings	31
2.2.4 Measurements.....	31
2.2.5 Tests.....	31
2.2.6 Instructions for use.....	33
2.3 Standardization system	33
2.3.1 Specification standards	33
2.3.2 Interface standards.....	33
2.3.3 Performance standards.....	35
2.3.4 Reliability standards	35
2.3.5 Interlinking.....	37
2.4 Design and construction	41
2.4.1 Materials	41
2.5 Workmanship	41
2.6 Quality.....	41
2.7 Performance.....	41
2.8 Identification and marking.....	41
2.8.1 Variant identification number	41
2.8.2 Component marking.....	43
2.8.3 Package marking	43
2.9 Storage conditions.....	43
2.10 Safety.....	43
3 Quality assessment procedures.....	45
3.1 Primary stage of manufacture.....	45
3.2 Structurally similar components.....	45

3.3	Qualification approval procedures	45
3.3.1	Fixed sample procedure	47
3.3.2	Lot-by-lot and periodic procedures.....	47
3.3.3	Qualifying specimen	47
3.3.4	Sample size.....	47
3.3.5	Preparation of specimens	47
3.3.6	Qualification testing.....	49
3.3.7	Qualification failures.....	49
3.3.8	Maintenance of qualification approval.....	49
3.3.9	Qualification report	49
3.4	Quality conformance inspection.....	49
3.4.1	Lot-by-lot inspection	51
3.4.2	Periodic inspection	51
3.5	Certified records of released lots.....	53
3.6	Delayed deliveries.....	53
3.7	Delivery release before completion of group B tests	53
3.8	Alternative test methods.....	53
3.9	Unchecked parameters.....	55
Figure 1 – Standardization system.....		39
Figure 2 – Standards interlink matrix.....		39
Figure 3 – Quality assurance options.....		39
Table 1 – Multilevel IEC specification structure.....		29

<https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC ENCLOSURES –**Part 1: Generic specification**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62134-1 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:

FDIS	Report on voting
86B/1642/FDIS	86B/1670/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 3.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

INTRODUCTION

IEC 62134, which is a generic specification, is divided into three parts.

Part 1, entitled “General”, contains pertinent explanatory and reference information.

Part 2, entitled “Requirements”, contains all of the requirements that are to be met by fibre optic enclosures covered by this specification. The requirements for classification, documentation, design and construction, quality, performance, identification and marking, storage conditions, and safety are covered in this part.

Part 3, entitled “Quality assessment procedures”, contains all of the procedures that are to be followed for proper quality assessment of products covered by this standard.

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

SIST EN 62134-1:2004

<https://standards.iteh.ai/catalog/standards/sist/3ae7acce-51ac-471e-8bc2-f5b1b1c2381b/sist-en-62134-1-2004>

FIBRE OPTIC ENCLOSURES –

Part 1: Generic specification

1 General

1.1 Scope

Enclosures comprise a broad component family that functions to protect, secure and store passive fibre optic components (such as splices or connectors) or other non-interconnecting devices (such as optical branching devices). They are installed at either indoor or outdoor locations, and provide access to the optical path of one or more cabled optical fibres. They also generally provide for the orderly management, routing, and storage of optical fibres (such as splice organizers or connector mounting plates). Configuration definitions may specify integrated functions, or permit grouped combinations of compatible independent sub-units. Specific classification requirements vary, and may or may not include isolation from environmental hazards (such as water ingress), structure codes (such as fire safety), or other appropriate considerations.

Enclosures are not intended to provide the primary packaging or structure for uncabled optical fibre splices (such as a rigid mechanical splice shell, or a fusion splice protection sleeve). Specification for those devices is defined in IEC 61073-1.

It is also intended that enclosures specified under this standard are not sufficiently characterized for continuous brine or deep-water submersion. Examples of this are oceanic or lake-crossing applications. Cables, closures and installation methods suited to this use are highly specialized and are not within the scope of this standard or supporting test procedures.

Due to the diverse variety of subordinate specifications possible under this generic specification, the sectional specification level has been retained (see 2.2.1). This format will aid definition clarity for individual component sub-families and requirements, and provide relevant associated blank detail specifications.

This standard establishes uniform requirements for the following:

- fibre optic enclosure generic requirements;
- qualification approval and quality assessment procedures.

1.2 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.

IECQ 001001, *IEC Quality Assessment System for Electronic Components (IECQ) – Basic Rules*