



SLOVENSKI STANDARD

SIST EN 62572-3:2014

01-oktober-2014

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**Aktivne komponente in naprave optičnih vlaken - Standardi zanesljivosti - 3. del:
Laserski moduli za telekomunikacije (IEC 62572-3:2014)**

Fibre optic active components and devices - Reliability standards - Part 3: Laser modules used for telecommunication

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33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices

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EUROPEAN STANDARD

EN 62572-3

NORME EUROPÉENNE

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August 2014

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**Fibre optic active components and devices - Reliability standards -
Part 3: Laser modules used for telecommunication
(IEC 62572-3:2014)**

Composants et dispositifs actifs en fibres optiques - Normes
de fiabilité - Partie 3: Modules laser utilisés pour les
télécommunications
(CEI 62572-3:2014)

Aktive Lichtwellenleiterbauelemente und -geräte -
Zuverlässigkeitsnormen - Teil 3: Lasermodule für
Telekommunikationsanwendungen
(IEC 62572-3:2014)

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

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

Foreword

The text of document 86C/1234/FDIS, future edition 2 of IEC 62572-3, prepared by SC 86C "Fibre optic systems and active devices" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62572-3:2014.

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) 2015-04-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-07-24

This document supersedes EN 62572-3:2012.

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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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	-
IEC 60068-2-14	-	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	-
IEC 60747-1	-	Semiconductor devices - Part 1: General	-	-
IEC 60749-6	-	Semiconductor devices - Mechanical and climatic test methods Part 6: Storage at high temperature	EN 60749-6	-
IEC 60749-8	-	Semiconductor devices - Mechanical and climatic test methods - Part 8: Sealing	EN 60749-8	-
IEC 60749-10	-	Semiconductor devices - Mechanical and climatic test methods - Part 10: Mechanical shock	EN 60749-10	-
IEC 60749-11	-	Semiconductor devices - Mechanical and climatic test methods - Part 11: Rapid change of temperature - Two-fluid-bath method	EN 60749-11	-
IEC 60749-12	-	Semiconductor devices - Mechanical and climatic test methods - Part 12: Vibration, variable frequency	EN 60749-12	-
IEC 60749-25	-	Semiconductor devices - Mechanical and climatic test methods - Part 25: Temperature cycling	EN 60749-25	-
IEC 60749-26	-	Semiconductor devices - Mechanical and climatic test methods - Part 26: Electrostatic discharge (ESD) sensitivity testing - Human body model (HBM)	EN 60749-26	-
IEC/TR 62572-2	-	Fibre optic active components and devices - Reliability standards - Part 2: Laser module degradation	-	-
MIL-STD-883	-	Test methods and procedures for microelectronics	-	-

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IEC 62572-3

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic active components and devices – Reliability standards –
Part 3: Laser modules used for telecommunication**

**Composants et dispositifs actifs en fibres optiques – Normes de fiabilité –
Partie 3: Modules laser utilisés pour les télécommunications**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES –
RELIABILITY STANDARDS –****Part 3: Laser modules used for telecommunication**

FOREWORD

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International Standard IEC 62572-3 has been prepared by subcommittee 86C: Fibre optic systems and active devices of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2011. This second edition constitutes a technical revision in which multiple errors in references have been corrected.

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

FDIS	Report on voting
86C/1234/FDIS	86C/1259/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 62572 series, published under the general title *Fibre optic active components and devices – Reliability standards*, 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,
- withdrawn,
- replaced by a revised edition, or
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INTRODUCTION

The laser modules covered by this International Standard are purchased by system suppliers (SS) to be inserted in equipment, which in turn are supplied/sold to a system operator (SO) or a network operator (see definitions in Clause 3).

For the system operator to act as an informed buyer, he/she should have knowledge of the potential risks posed by the use of critical components..

Optoelectronic component technology is continuing to develop. Consequently, during product development phases, many failure mechanisms in laser modules have been identified. These failure mechanisms, if undetected, could result in very short laser lifetime in system use.

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