



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
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ILNAS-EN IEC 62149-3:2020

Fibre optic active components and devices - Performance standards - Part 3: Modulator-integrated laser diode transmitters for 40-Gbit/s fibre optic

Composants et dispositifs actifs
fibroniques - Normes de performances -
Partie 3: Émetteurs à diodes laser à
modulateur intégré pour systèmes de

Aktive Lichtwellenleiterbauelemente und
-geräte - Betriebsverhalten - Teil 3:
Sender mit modulatorintegrierten
Laserdioden für 40 Gbit/s-

09/2020



National Foreword

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Supersedes EN 62149-3:2014 and all of its amendments
and corrigenda (if any)

English Version

**Fibre optic active components and devices - Performance
standards - Part 3: Modulator-integrated laser diode transmitters
for 40-Gbit/s fibre optic transmission systems
(IEC 62149-3:2020)**

Composants et dispositifs actifs fibroniques - Normes de
performances - Partie 3: Émetteurs à diodes laser à
modulateur intégré pour systèmes de transmission
fibroniques 40 Gbit/s
(IEC 62149-3:2020)

Aktive Lichtwellenleiterbauelemente und -geräte -
Betriebsverhalten - Teil 3: Sender mit modulatorintegrierten
Laserdioden für 40 Gbit/s-Lichtwellenleiter-
Übertragungssysteme
(IEC 62149-3:2020)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 86C/1666/FDIS, future edition 3 of IEC 62149-3, 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 IEC 62149-3:2020.

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) 2021-05-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-08-11

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

IEC 60068 (series)	NOTE	Harmonized as EN 60068 (series)
IEC 60793 (series)	NOTE	Harmonized as EN IEC 60793 (series)
IEC 60825 (series)	NOTE	Harmonized as EN 60825 (series)
IEC 60874 (series)	NOTE	Harmonized as EN 60874 (series)
IEC 61280 (series)	NOTE	Harmonized as EN 61280 (series)
IEC 62007-2	NOTE	Harmonized as EN 62007-2

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where 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 60068-2-2	-	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	-
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-14	-	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	-
IEC 60068-2-27	-	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	-
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 60749-7	-	Semiconductor devices - Mechanical and climatic test methods - Part 7: Internal moisture content measurement and the analysis of other residual gases	EN 60749-7	-
IEC 60749-26	-	Semiconductor devices - Mechanical and climatic test methods - Part 26: Electrostatic discharge (ESD) sensitivity testing - Human body model (HBM)	EN IEC 60749-26	-
IEC 60825-1	-	Safety of laser products - Part 1: Equipment classification and requirements	EN 60825-1	-
IEC 60950-1	-	Information technology equipment - Safety - Part 1: General requirements	EN 60950-1	-

IEC 62007-1	-	Semiconductor optoelectronic devices for fibre optic system applications - Part 1: Specification template for essential ratings and characteristics	EN 62007-1	-
IEC 62572-3	-	Fibre optic active components and devices - Reliability standards - Part 3: Laser modules used for telecommunication	EN 62572-3	-
ITU-T G.694-1	-	Spectral grids for WDM applications: DWDM frequency grid	-	-
ITU-T G.957	-	Optical interfaces for equipments and systems relating to the synchronous digital hierarchy	-	-
MIL-STD-883-1	-	U.S. Department of Defense - Test method standard - Environmental test methods for microcircuits, Part 1: Test methods 1000-1999	-	-



INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Part 3: Modulator-integrated laser diode transmitters for 40-Gbit/s fibre optic
transmission systems**

**Composants et dispositifs actifs fibroniques – Normes de performances –
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transmission fibroniques 40 Gbit/s**

CONTENTS

FOREWORD	3
INTRODUCTION	5
1 Scope	6
2 Normative references	6
3 Terms, definitions and abbreviated terms	7
3.1 Terms and definitions	7
3.2 Abbreviated terms	7
4 Product parameters	7
4.1 Absolute limiting ratings	7
4.2 Operating environment	8
4.3 Functional specification	8
4.4 Diagrams	10
5 Testing	10
5.1 General	10
5.2 Characterization testing	10
5.3 Performance testing	12
6 Environmental specifications	13
6.1 General safety	13
6.2 Laser safety	14
Bibliography	15
Figure 1 – Schematic diagram	10
Table 1 – Absolute limiting ratings	8
Table 2 – Operating environment	8
Table 3 – Operating conditions for functional specification	9
Table 4 – Functional specification	9
Table 5 – Characterization tests	11
Table 6 – Performance test plan	12
Table 7 – Recommended performance test failure criteria	13