



BSI Standards Publication

Fibre optic active components and devices — Performance standards

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

National foreword

This British Standard is the UK implementation of EN IEC 62149-3:2023. It is identical to IEC 62149-3:2023. It supersedes BS EN IEC 62149-3:2020, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/86/3, Fibre optic systems and active devices.

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

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Amendments/corrigenda issued since publication

Date	Text affected
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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 62149-3:2023)**

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 62149-3:2023)

Aktive Lichtwellenleiterbauelemente und -geräte -
Betriebsverhaltensnormen - Teil 3: Modulator-integrierte
Laserdioden-Sender für 40 Gbit/s-Lichtwellenleiter-
Übertragungssysteme
(IEC 62149-3:2023)

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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/1839/CDV, future edition 4 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 62149-3:2023.

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) 2024-05-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-08-23

This document supersedes EN IEC 62149-3:2020 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 62149-3:2023 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 standard indicated:

IEC 60068 (series) NOTE Approved as EN 60068 (series)

IEC 60793 (series) NOTE Approved as EN IEC 60793 (series)

IEC 60825 (series) NOTE Approved as EN 60825 (series)

IEC 60874 (series) NOTE Approved as EN 60874 (series)

IEC 61280 (series) NOTE Approved as EN IEC 61280 (series)

IEC 62007-2 NOTE Approved 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		-
IEC 61300-2-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre or cable retention	EN IEC 61300-2-4	-
IEC 62007-1	-	Semiconductor optoelectronic devices for fibre optic system applications - Part 1: Specification template for essential ratings and characteristics	EN 62007-1	-

EN IEC 62149-3:2023 (E)

IEC 62149-1	-	Fibre optic active components and devices EN 62149-1 - Performance standards - Part 1: General and guidance	-
IEC 62572-3	-	Fibre optic active components and devices EN 62572-3 - Reliability standards - Part 3: Laser modules used for telecommunication	-
ITU-T Recommendation G.694.1	-	Spectral grids for WDM applications: DWDM frequency grid	-
ITU-T Recommendation G.957	-	Optical interfaces for equipment 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	-

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