

INTERNATIONAL STANDARD

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**Fibre optic active components and devices – Packaging and interface standards –
Part 22: 25 Gbit/s directly modulated laser packages with temperature control
unit**

**Composants et dispositifs actifs fibroniques – Normes de boîtier et d’interface –
Partie 22: Boîtiers pour laser à modulation directe 25 Gbit/s équipés d’une unité
de régulation de température**



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INTERNATIONAL
ELECTROTECHNICAL
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COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 33.180.20

ISBN 978-2-8322-6528-4

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES –
PACKAGE AND INTERFACE STANDARDS –****Part 22: 25 Gbit/s directly modulated laser packages
with temperature control unit**

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The text of this International Standard is based on the following documents:

Draft	Report on voting
86C/1851/FDIS	86C/1859/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 62148 series, published under the general title *Fibre optic active components and devices – Package and interface standards*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
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INTRODUCTION

Fibre optic laser devices are used to convert electrical signals into optical signals. This document covers the physical dimensions and interfaces for directly modulated laser (DML) packages which are intended to be applied to 25 Gbit/s transceivers.

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FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES – PACKAGE AND INTERFACE STANDARDS –

Part 22: 25 Gbit/s directly modulated laser packages with temperature control unit

1 Scope

This part of IEC 62148 defines the physical dimensions and interface specifications for directly modulated laser (DML) devices used in optical telecommunication and optical data transmission applications.

The intent of this document is to adequately specify the physical requirements for DML devices so as to enable mechanical interchangeability of laser devices or transmitters complying with this document both at the printed circuit board and for any panel-mounting requirements.

2 Normative references

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.

IEC 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 61753 (all parts), *Fibre optic interconnecting devices and passive components – Performance standard*

IEC 61754 (all parts), *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces*

IEC 61755 (all parts), *Fibre optic interconnecting devices and passive components – Fibre optic connector optical interfaces*

IEC 61754-20, *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 20: Type LC connector family*

IEC 62148-1, *Fibre optic active components and devices – Package and interface standards – Part 1: General and guidance*

3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms and definitions given in IEC 62148-1 and the following apply.

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