

INTERNATIONAL STANDARD

IEC 60825-2

Second edition
2000-05

Safety of laser products –

Part 2: Safety of optical fibre communication systems

Sécurité des appareils à laser –

Partie 2: Sécurité des systèmes de télécommunication par fibres optiques

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF LASER PRODUCTS –

Part 2: Safety of optical fibre communication systems

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.
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International Standard IEC 60825-2 has been prepared by IEC technical committee 76: Optical radiation safety and laser equipment.

This second edition cancels and replaces the first edition published in 1993 and amendment 1 (1997). This second edition constitutes a technical revision.

The text of this standard is based on the first edition, amendment 1 and the following documents:

FDIS	Report on voting
76/208/FDIS	76/211/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.

IEC 60825-2 constitutes part 2 of a series of publications under the general title: Safety of laser products.

Annex B forms an integral part of this standard.

Annexes A, C, D and E are for information only.

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

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- withdrawn;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

A bilingual version of this standard may be issued at a later date.

Withdrawn

SAFETY OF LASER PRODUCTS –

Part 2: Safety of optical fibre communication systems

1 Scope

This part 2 of IEC 60825 provides requirements and specific guidance for the safe use of optical fibre and/or control communication systems where optical power may be accessible at great distance from the optical source. It does not apply to optical fibre systems primarily designed to transmit optical power for applications such as material processing or medical treatment.

Throughout this part of IEC 60825, light emitting diodes (LEDs) are included whenever the word "laser" is used.

The objective of this part 2 of IEC 60825 is to:

- protect people from optical radiation resulting from optical fibre communication systems. This requires the introduction of engineering requirements and work practices according to the degree of hazard;
- lay down requirements for manufacturers and operating organizations in order to establish procedures and supply information so that proper precautions can be adopted;
- ensure adequate warning to individuals of the hazards associated with optical fibre communication systems through signs, labels and instructions;
- reduce the possibility of injury by minimizing unnecessary accessible radiation, give improved control of the optical radiation through protective features and provide safe usage of products by specifying user control measures.

Annex A gives a more detailed rationale for this part of IEC 60825.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60825. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60825 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60794-2:1989, *Optical fibre cables – Part 2: Product specifications*

IEC 60825-1:1993, *Safety of laser products – Part 1: Equipment classification, requirements and user's guide*