

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Safety of laser products –
Part 2: Safety of optical fibre communication systems (OFCSs)**

**Sécurité des appareils à laser –
Partie 2: Sécurité des systèmes de télécommunications par fibres optiques
(STFO)**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF LASER PRODUCTS –

Part 2: Safety of optical fibre communication systems (OFCs)

FOREWORD

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

This fourth edition cancels and replaces the third edition published in 2004, Amendment 1:2006 and Amendment 2:2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition.

- a) Recommendations for individual components and subassemblies have been clarified; see Clause 1, paragraph 3.
- b) C_7 has been revised in accordance with IEC 60825-1:2014, but with an additional limitation related to the skin MPE; see 4.7.2.
- c) Condition 2 has been changed, and a detailed description of the measurement and determination method for hazard level has been added; see 4.7.1 and 4.7.2.
- d) Annex B has been moved into 4.9. Annex F has been moved forward as Annex B.
- e) Clause D.4 Hazard level evaluation examples – Additional examples have been added.
- f) Clause D.5 Fault analysis – Explanation and guidance has been simplified.

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

FDIS	Report on voting
76/670/FDIS	76/674/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60825 series, published under the general title *Safety of laser products*, 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 "<http://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- withdrawn,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
- amended.

INTRODUCTION

The objective of this document is to:

- protect people from optical radiation emitted by OFCSs;
- provide requirements for manufacturers, installation organizations, service organizations and operating organizations in order to establish procedures and supply information so that proper precautions can be adopted;
- ensure adequate warnings are provided to individuals regarding the potential hazards associated with OFCSs through the use of signs, labels and instructions.

Annex A gives a more detailed rationale for this document.

The safety of an OFCS depends to a significant degree on the characteristics of the equipment forming that system. Depending on the characteristics of the equipment, relevant safety information needs to be marked on the product or included within the instructions for use.

Where required by the level of potential hazard, the installation organization or end-user / operating organization or both are responsible for the safe deployment and use of OFCSs.

The installation organization and service organization are responsible for adherence to safety instructions during installation and service operations, respectively. The end-user or operating organization is responsible for adherence to safety instructions during operation and maintenance functions.

It is recognized that the user of this document can fall into one or more of the aforementioned categories of manufacturer, installation organization, end-user or operating organization.