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Integrated optics - Vocabulary - Part 1: Optical waveguide basic terms and symbols (ISO 11807-1:2021)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

**Integrated optics - Vocabulary - Part 1: Optical waveguide
basic terms and symbols (ISO 11807-1:2021)**

Optique intégrée - Vocabulaire - Partie 1: Termes
fondamentaux et symboles des guides d'onde optique
(ISO 11807-1:2021)

Integrierte Optik - Begriffe - Teil 1: Grundbegriffe und
Formelzeichen optischer Wellenleiter (ISO 11807-
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 11807-1:2021 (E)

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European foreword

This document (EN ISO 11807-1:2021) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 123 "Lasers and photonics" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2022, and conflicting national standards shall be withdrawn at the latest by April 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 11807-1:2005.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 11807-1:2021 has been approved by CEN as EN ISO 11807-1:2021 without any modification.

INTERNATIONAL STANDARD

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Integrated optics — Vocabulary —

Part 1: Optical waveguide basic terms and symbols

Optique intégrée — Vocabulaire —

Partie 1: Termes fondamentaux et symboles des guides d'onde optique



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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ISO 11807-1:2021(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 172 *Optics and photonics*, Subcommittee SC 9, *Laser and electro optical systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 123, *Lasers and photonics*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 11807-1:2001), which has been technically revised. The main changes compared to the previous edition are as follows:

- Terminologies that have not been frequently used over the last 5 to 10 years are revised to those matching to current trends.
- In the revision process, terminologies and definitions are compared to similar terminology definitions in IEC and harmonized.

A list of all parts of ISO 11807 can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The aim of this document is to clarify the terms of the field of “integrated optics” and to define a unified vocabulary. It is expected that this document will be revised periodically to adopt the requirements of customers and suppliers of integrated optical products. At a later stage, it is planned to add definitions from other International Standards which deal with integrated optics.

Some of the definitions are closely related to definitions given in IEC 60050-731. Wherever this can lead to misunderstanding, integrated optics or integrated optical waveguide should be used together with the defined term.

Integrated optics — Vocabulary —

Part 1:

Optical waveguide basic terms and symbols

1 Scope

This document defines basic terms for integrated optical devices, their related optical chips and optical elements which find applications, for example, in the fields of optical communications and sensors.

- The coordinate system used in [Clause 3](#) is described in [Annex A](#).
- The symbols and units defined in detail in [Clause 3](#) are listed in [Annex B](#).

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.

ISO 11807-2, *Integrated optics — Vocabulary — Part 2: Terms used in classification*

ISO 14881, *Integrated optics — Interfaces — Parameters relevant to coupling properties*

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