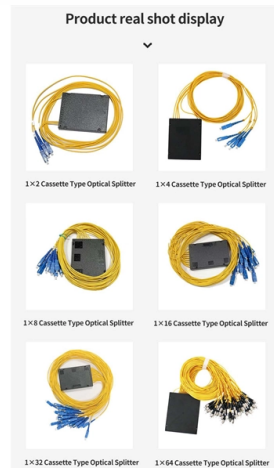


Which factories use laser diodes



Overview

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Key Takeaways

Laser diodes are manufactured and used by leading photonics and semiconductor companies worldwide, including Coherent, OSRAM, Lumentum, TRUMPF, Jenoptik, ams-OSRAM, and IPG Photonics.

- Coherent, Inc. – Supplies lasers and laser-based technologies for scientific, medical, and commercial applications, including industrial processing and research sectors .
- OSRAM / ams-OSRAM AG – Produces diode lasers for 3D sensing, automotive lighting, LiDAR systems, and medical imaging, widely used in consumer electronics and mobility applications .
- Lumentum Operations LLC – Provides diode lasers, VCSEL arrays, and tunable lasers for telecom, 3D sensing, and autonomous vehicle sensors .
- TRUMPF – Specializes in high-power industrial laser systems for metal processing, welding, cutting, and marking .
- Jenoptik AG – Offers laser diodes for industrial, medical, and defense applications .
- IPG Photonics Corporation – Focuses on high-power fiber lasers and diode lasers for industrial and scientific use .



- Frankfurt Laser Company – Supplies FP, DFB, and DBR laser diodes for telecommunications, medical, industrial, and entertainment applications .
 - LD-PD PTE. LTD. – Provides high-performance laser diodes for optical communication, LiDAR, medical systems, and advanced research .
 - Excelitas Technologies Corp. – Manufactures photonic solutions including laser diodes for sensing, communication, and industrial applications .
 - ProPhotonix – Offers laser diode modules and systems for industrial, medical, and scientific applications .
- Applications Across Industries
- Industrial Manufacturing – Laser diodes are used in metal cutting, welding, hardening, cladding, and laser marking .
 - Automotive – Employed in LiDAR systems, advanced driver-assistance systems (ADAS), and luxury car headlights .
 - Healthcare – Used in medical procedures such as LASIK, skin resurfacing, tattoo removal, and body contouring .
 - Telecommunications – Serve as light sources in fiber-optic communication systems .
 - Consumer Electronics – Found in optical drives (CD/DVD/Blu-ray), barcode scanners, and 3D sensing for smartphones .
 - Research and Sensing – Applied in LiDAR, optical imaging, and scientific instrumentation . These companies often operate globally, with manufacturing facilities in Europe, the U.S., and Asia, supporting both mass production and specialized applications. Laser diodes are integral to modern technology due to their compact size, energy efficiency, and coherent light output, making them essential in both industrial and consumer products .

Article Content

Top 10 Laser Technology Companies and Their Portfolio

Their reliable laser diodes cater to applications in medical diagnostics, telecom, and aerospace, while their laser rangefinders are

Laser Diodes: A Comprehensive Guide

Laser diodes are a type of laser that generate laser radiation through a semiconductor. They vary in wavelength, power, and fiber

IPG Photonics

IPG invested much of its remaining capital in the development of: (1) high-power industrial fiber lasers; (2) mass production lines; and

Quality Diode Laser Module & Fiber Coupled Diode Laser factory

China leading provider of Diode Laser Module and Fiber Coupled Diode Laser, Hyperline Beijing Ltd. is Fiber Coupled Diode Laser

Industrial Diode Laser Manufacturer | LASERLINE

Diode lasers with a blue wavelength are also used for processing non-ferrous metals. Coupled with the provision of know-how,

Related Video Reference

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