

Large-scale laser diode manufacturers



AI Overview

Top global laser diode brands include Coherent, IPG Photonics, OSRAM, TRUMPF, Jenoptik, ams-OSRAM, and Lumentum, all recognized for high-power and industrial applications.

Leading Laser Diode Manufacturers

1. Coherent, Inc. – A major player in high-power laser diodes, Coherent provides solutions for industrial processing, medical devices, and scientific research, offering both edge-emitting and fiber-coupled diode systems .
2. IPG Photonics Corporation – Specializes in high-power fiber lasers and diode lasers, widely used in materials processing, automotive manufacturing, and defense applications .
3. OSRAM / ams-OSRAM AG – Offers a broad range of diode lasers, including VCSELs and edge-emitting diodes, for applications in 3D sensing, LiDAR, automotive lighting, and medical imaging .
4. TRUMPF – Known for industrial laser systems, TRUMPF produces high-power diode modules for cutting, welding, and additive manufacturing .
5. Jenoptik AG – Provides laser diodes for industrial, medical, and scientific applications, including precision measurement and laser processing .
6. Lumentum Operations LLC – Supplies diode lasers, VCSEL arrays, and tunable lasers for telecom, 3D sensing, and autonomous vehicle sensors, emphasizing high-performance and integrated solutions .
7. Frankfurt Laser Company, OSI Laser Diode, Inc., and ProPhotonix – Recognized for specialized laser diode modules and high-reliability systems for industrial and scientific use .

Applications and Technology

Large-scale laser diode brands focus on high-power and industrial applications, including:

- Materials processing: cutting, welding, and marking
- Medical procedures: laser surgery, dermatology, and ophthalmology
- 3D sensing and LiDAR: automotive and robotics
- Telecommunications: optical fiber communication systems
- Consumer electronics: facial recognition and optical pickups

Technologies vary by brand, with edge-emitting diodes providing high output power, VCSELs offering compact and efficient solutions for sensing, and mult...

Article Content

Laser Diode Market Report: Size, Growth, Trends

Laser Diode Market size was valued at USD 11.35 Billion in 2024 and is projected to reach USD 26.73 Billion by 2032, growing at a CAGR of 11.30% from 2026-2032

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, design, individual additional

GaAs nano-ridge laser diodes fully fabricated in a 300

Here we report the electrically driven gallium arsenide (GaAs)-based laser diodes fully fabricated on 300-mm Si wafers in a CMOS pilot manufacturing

Laser Diode Companies

Laser Diode industry insights on factors that are driving the growth of the Laser Diode Market and key players along with their go to market strategies and new revenue sources.

Home | Hamamatsu Photonics

The official website of Hamamatsu Corporation whose mission is to advance science and industry through photonic technologies. Our products include optical sensors

Laser Diode Market: Top 10 Companies & Key Players

Laser diode market leaders ranked: the top 10 companies powering telecom, healthcare, and defense innovation, with each player's edge and focus

Inertia — The Commercial Fusion Energy Company

Build the world's most powerful laser Mass manufacture fusion fuel targets Build a gigawatt grid-scale plant In December 2022, at the National Ignition Facility in

Top 5 Laser Diode Manufacturers in the World

IPG Photonics is a leading developer and manufacturer of high-performance fiber lasers, amplifiers, and diode lasers. It is known for its extensive research and development capabilities, which have allowed

Status and Perspectives of High-Power Pump Diodes for Inertial

State of the art in pulsed diode performance in 2013 was 500 W peak optical power per rod with 1.5 mm cavity length . In this whitepaper, we provide an update on the technical progress and

Leading Laser Diode Manufacturer | Custom Solutions & Global

Discover premium laser diode manufacturers offering 650nm-1064nm wavelengths for medical, industrial, and beauty applications. Need reliable OEM partners? Click to verify certified

Top 5 Laser Diode Manufacturers Companies in the World

Top laser diode companies include Coherent, Inc., IPG Photonics Corporation, OSRAM, TRUMPF, and Jenoptik AG, among others.

Laser Diode Companies

List of the top Laser Diode companies based on extensive research conducted by Mordor Intelligence analysts and expert advisors that identified these brands to

Top 10 Laser Diode Manufacturers in China

Discover the top 10 laser diode manufacturers in China, including Vivlaser, Everbright, BWT, Raycus, and more.

Atlantic International University

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Laser Diode Market: Global Industry Analysis

The laser diode market has experienced robust growth over the past few years, driven by its extensive applications across various industries,

Diode Lasers | Suppliers | Photonics Buyers' Guide | Photonics

Explore 138 top manufacturers and suppliers of Diode Lasers in our comprehensive photonics buyers' guide. A diode laser is a type of laser that uses a semiconductor diode as the active medium to

Laser Diode Manufacturers

A Laser Diode is a type of semiconductor device that produces coherent light through the process of stimulated emission. The leading manufacturers of Laser Diodes are listed below. Narrow down on

48 Laser Diode Manufacturers in 2026

This section provides an overview for laser diodes as well as their applications and principles. Also, please take a look at the list of 48 laser diode manufacturers and their company rankings.

Diode Laser Engineer (f/m/d) @ Focused

Focused Energy is a fusion energy startup with the goal of generating unlimited clean energy to responsibly meet future global demand. With the use and commercialization of laser-induced inertial

Top Laser Diode Manufacturers | Verified Global Suppliers Directory

Need reliable laser diode manufacturers? Discover certified suppliers offering high-power diodes for medical, industrial, and beauty applications. Compare specifications and request quotes

Laser Diodes - Buyer's Guide & Supplier List | RP Photonics

This buyer's guide for laser diodes provides technical background, comparison of major types, selection criteria, and an overview of suppliers.

Top 5 Laser Diode Manufacturers in the World

The global laser diode market has several major players including Coherent, IPG Photonics, OSRAM Licht AG, TRUMPF GmbH + Co. KG, and Jenoptik AG. More information about these companies has

Laser Diode Manufacturers & Suppliers | ProPhotonix

High quality laser diode manufacturers including brands like Osram, Ushio, QSI and Ondax. Click to discover more.

Laser Diode Market Size, Forecast Report, Competitive

Laser Diode Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)
The Laser Diode Market Report is Segmented by Type

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