

Article Overview

Custom laser diodes can be sourced directly from manufacturers like LDX Optronics, BU-LASER, TRUMPF, and via GoPhotonics for tailored specifications, packaging, and high-reliability applications.

Leading Manufacturers and Solutions

LDX Optronics specializes in high-power multimode laser diodes with wavelengths ranging from 405 nm to 1900 nm. They offer US-made solutions with advanced packaging, lensing, fiber coupling, TEC integration, and flux/void-free soldering for superior thermal performance and long-term reliability. LDX provides tailored solutions including custom wavelength, power, and packaging, along with just-in-time delivery and lifetime supply options, making them suitable for industrial, medical, defense, and space applications. BU-LASER provides custom laser diode modules and fiber-coupled lasers with wavelengths from 375 nm to 980 nm. They serve industries such as 3D scanning, medical beauty, laser security, and laser engraving. BU-LASER offers OEM/ODM services, ensuring each module is designed to meet specific customer requirements, backed by over 15 years of experience and 80+ patents. TRUMPF manufactures laser diodes and pump modules from their vertically integrated facility in New Jersey, USA. They supply single-emitter diodes, diode bars, and mounted chips for industrial, additive manufacturing, and scientific applications. TRUMPF offers wavelengths from 790 nm to 1100 nm, with options for high-power modules (100 W to 600 W) and multi-kW stack arrays, emphasizing high reliability and specialized packaging for harsh environments. GoPhotonics acts as a platform to request quotations from multiple manufacturers simultaneously. Users can submit specifications and supporting files, then select up to five manufacturers to receive direct quotes, streamlining the process of sourcing custom laser diodes.

Customization Capabilities

Manufacturers can provide:

- o Specific wavelengths and power levels tailored to your application
- o Hermetically sealed packages for environmental protection
- o Integrated TECs and photodiodes for thermal and optical stability
- o Fiber coupling and lensing options for precise beam shaping
- o High-reliability soldering and packaging for industrial or medical use

Considerations for Direct Manufacturer Supply

- o Lead times and production volumes: Some manufacturers can scale from prototype to high-volume production.



Custom-made laser diodes directly supplied by the manufacturer

- o Technical support: Direct manufacturer engagement ensures design assistance and quality control.
- o Regulatory compliance: Especially important for medical, defense, or aerospace applications.
- o US-made vs. international supply: US-based manufacturers like LDX and TRUMPF offer secure supply chains and reduced risk of tariffs or delays. By contacting these manufacturers directly or using platforms like GoPhotonics, you can obtain custom laser diodes that meet precise specifications, high reliability, and tailored packaging for your specific application needs .

The leading laser company for integrated & customized diode laser manufacturing solutions for various industries & applications.

Whether it is diodes for extremely high reliability applications such as LiDAR pumping or high-power pump modules for industrial and

Collaboration with a trusted custom laser diode manufacturer is key to unleashing the full potential of these solutions.

Whether you require a specific wavelength, power output, or packaging style, our engineers collaborate closely to

FLC - Frankfurt Laser Company GmbH is a world leading supplier of FP, DFB and DBR laser diodes, SM individually addressable

BluGlass offers GaN lasers to the industrial, defence, quantum, scientific, biotech and display markets. Our full suite, end-to-end

LDX Optronics: High-power multimode laser diodes (405-1900 nm). 35+ years, US-made, dedicated cleanroom facility. Flux/void

Laser diode and laser diode systems by World Star Tech. Contact us for your laser diode solutions and requirements.

We design and manufacture OEM laser diode modules tailored to your application requirements. Custom

Find your laser diode easily amongst the 84 products from the leading brands (OVIO INSTRUMENTS, Changchun New Industries,

With nearly 30 years of experience providing the right laser at the best price, RPMC has the partnerships & technical knowledge to



Custom-made laser diodes directly supplied by the manufacturer

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

261nm-1481nm+ and 1mW-1kW+, featuring high precision, advanced modulation, specialty optics, USB control, and custom solutions

Laser Diodes Custom Laser Diode Requirement Get Quotations on your custom Laser Diode requirement from multiple

Learn what to look for when selecting a high-power laser diode manufacturer. Akela Laser

We provided the wavelength needed, developed the lensing specification that met the customer's needs, and provide the laser diode,

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