



## LASER IS A RESILIENT BUSINESS WITH EXPECTED MARKET GROWTH IN MANY SEGMENTS



### INFORMATION SOURCES

- In-house knowledge of Laser technologies, their applications and their markets.
- Market data based on financial & business information on 400+ Laser Technologies' market players.
- Interviews with key companies that manufacture Laser sources and with Laser integrators and suppliers.
- Literature research.
- Participation in international conferences and webinars in the universe of Lasers.

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While overall global production showed modest growth, the laser industry remained resilient, achieving nearly 7% growth compared to 2022.

The top 10 laser manufacturers saw a significant revenue increase of over 20%, driven by momentum from the strong post-COVID performance in manufacturing and high-tech sectors during 2021 and 2022.

However, despite earlier optimism, key industries relying on lasers did not perform as expected, which may lead to more cautious planning in the laser market for 2024 and 2025.

But we are confident the laser market will continue to grow with a 5% CAGR over 2023-2029 to exceed US\$20b in 2029.

The laser market showed diverse performance across segments:

- **kW materials processing** grew but faces challenges ahead due to industry slowdowns
- **sub-kW materials processing** remains robust, with significant growth in medical device manufacturing
- **Marking and engraving** grew in units but saw revenue declines due to price drops
- **Photolithography** struggled in 2023 but is expected to recover by 2027
- **Communications** lasers are set to grow in 2024-2025, driven by AI, datacentre expansion, and M2M applications.

- **Sensing and Instrumentation:** Growth in life sciences and industrial sensing is driven by challenges in healthcare, essential goods production, and energy transition requiring precise laser-based devices. In Automotive and Mobility, the laser market, including LiDAR for ADAS, will grow significantly as cost-effective solutions enable wider adoption in mass-market vehicles. For Mobile and Consume,: ToF sensors using lasers in smartphones, cameras, and AR/VR systems are expected to grow rapidly for consumer and professional applications.

- In **Medicine and Cosmetics**, affordable diode laser technologies expand accessibility to medical and cosmetic applications, including home-based cosmetic treatments.

- In **Aerospace and Defense**, the global tensions and the need for modernized arsenals will drive increased sales of lasers for defense, including military sensing and high-power laser weapons. Significant investments are being made worldwide in laser systems.

- For **R&D**, the push for greener energy, innovative medicines, and new technologies will boost global funding for R&D projects, benefiting the laser market. Lasers are vital tools in various research fields, including quantum technologies, physics, chemistry, materials science, and biology.

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- Research and Development



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- **2023: RAMAN TECHNOLOGIES: Technologies, Markets Trends and Customers' Needs**
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# Global Market of Lasers 2025: Technologies, Markets, Applications and Future Trends

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