Global Ultrafast Laser Market Research Report: By Type (Titanium-Sapphire, Diode-Pumped, Fiber Lasers, and Mode-Locked Diode), by Pulse Duration (Femtosecond and Picosecond), and by Application (Biomedical, Spectroscopy & Imaging) – Forecast till 2023

Market Synopsis of Ultrafast Laser Market

Market Scenario

The ultrafast laser market is not just growing, it is accelerating. Ultrafast lasers possess unique ability to deliver high peak power without thermal damage which makes them better suited for biomedical and biological applications. The rise in demand for ultrafast laser across biomedical applications is one major factor driving the growth of ultrafast laser market. Also, increasing need for cost-efficient solutions for micromachining is another major factor responsible for driving the growth of ultrafast laser market.

Amplitude Systemes, Attodyne Inc., Clark-MXR, Inc., Coherent Inc., DPSS Lasers Inc., EKSPLA, Epilog Laser, IMRA America, IPG Photonics are a few major players in the global ultrafast laser market. Increasing deployment of ultrafast lasers in science and research will open the market for new players. Also, advancements in materials and laser configurations are set to drive the growth of the ultrafast laser market.

The type segment comprises of titanium-sapphire lasers, diode-pumped lasers, fiber lasers, and mode-locked diode lasers. The fiber lasers and diode-pumped lasers segments are expected to hold the largest market share of the ultrafast laser market during the forecast period. This is owing to the increasing demand for ultrafast lasers across various applications. Also, the growing trend of adopting ultrafast lasers and the declining prices are also responsible for driving the growth of the market.

The North America region holds the largest share of the market across the globe followed by Europe, and Asia Pacific region. The U.S. and Canada are dominating the North America market due to rising technological enhancements and growing adoption of ultrafast lasers in the region. Moreover, the region has a well-established infrastructure, which allows faster implementation of advanced technologies. Additionally, the growing adoption of ultrafast lasers across different applications such as biological, biomedical, and science & research is another major factor driving the growth of the ultrafast laser market in the region.

The global ultrafast laser market is expected to grow at a CAGR of approximately 20% during the forecast period 2017-2023.

Global Ultrafast laser Market
Key Players

Some of the prominent players in the global ultrafast laser market are Amplitude Systemes (France), Attodyne Inc. (Canada), Clark-MXR, Inc. (U.S.), Coherent Inc. (U.S.), DPSS Lasers Inc. (U.S.), EKSPLA (Lithuania), Epilog Laser (U.S.), IMRA America (U.S.), IPG Photonics (U.S.), JENOPTIK Laser GmbH (Germany), Laser Quantum (U.K), Lumentum Operations LLC (U.S.), Newport Corporation (U.S.), NKT Photonics (U.S.), Resonetics (U.S.), Rofin-Sinar Laser GmbH (Germany), Sheaumann Laser Inc. (U.S.), and Spectra-Physics (U.S.) among others.

Segments

The global ultrafast laser market is segmented by type, pulse duration and application. Based on the type, the market is segmented into titanium-sapphire lasers, diode-pumped lasers, fiber lasers, and mode-locked diode lasers. Based on the pulse duration, the market is segmented into femtosecond and picosecond. Whereas, based on the application, the market is segmented into biomedical, materials processing, spectroscopy & imaging, science & research, and others.

Regional Analysis

The global ultrafast laser market is studied in Asia Pacific, North America, Europe, and Rest of the World. North America is estimated to account for the largest share of the market, whereas Asia Pacific is projected to grow at the fastest rate during the forecast period. The growth of the market in North America is attributed to technological advancements and increased adoption of ultrafast laser applications across various industry verticals.

Intended Audience

- Technology Investors
- Research/Consultancy firms
- Government Bodies
- Ultrasoft Laser Manufacturers
- Ultrasoft Laser Providers
- Consulting service providers
- Technology Providers
- System integrators

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