

# **Lasers: Global Markets to 2024**

https://marketpublishers.com/r/LD73380AADDEN.html

Date: August 2019

Pages: 135

Price: US\$ 2,750.00 (Single User License)

ID: LD73380AADDEN

## **Abstracts**

#### **REPORT SCOPE:**

The report is a compilation of the existing BCC reports in laser market. The topics analyzed within the report include a detailed breakdown and analysis of the global markets for lasers. The scope of this report extends to sizing of the laser market and an analysis of global market trends with market data for various types of devices at global level in 2018, which is being considered as the base year, 2019 as the estimate year and forecast for 2024 with projection of CAGR from 2019 to 2024.

The report focuses on assessment of laser devices, suppliers and an analysis of companies/ manufacturers and the related system providers. Market dynamics such as drivers, restraints, opportunities and challenges are also discussed in the report.

While this report contains a significant amount of technical information due to the inherent nature of the subject and thus provides information valuable to engineers and scientists, it is primarily aimed at business professionals in field of lasers. These may include manufacturers and their suppliers, financiers and investors, researchers with backgrounds in engineering and sciences, marketing and sales professionals, and others.

This report may also prove valuable to professional analysts, investors, public policy advisors and others who are seeking a better understanding and definition of lasers market.

#### REPORT INCLUDES:

19 tables



An overview of global markets and technologies for lasers

Analyses of global market trends, with data from 2018, estimates for 2019, and projections of compound annual growth rates (CAGRs) through 2024

Description of laser properties such as ease of handling, more accuracy and precision, cost effective operation and quality assurance

Coverage of ion laser, helium-neon (HeNe) laser, and helium-cadmium laser and their applications in several industries

Information on government regulations and guidelines for the mandatory usage of ultrafast lasers

Knowledge about usage of lasers in marking medical devices in order to comply with U.S. Food and Drug Administration guidelines

Comprehensive company profiles of key players in the market, including Applied Companies Inc., Coherent Inc., Hamamatsu Photonics K.K., Newport Corp., Robert Bosch GmbH and Schneider Electric S.A.



## **Contents**

#### **CHAPTER 1 INTRODUCTION**

Study Background
Study Goals and Objectives
Reasons for Doing This Study
Scope of Report
Methodology and Information Sources
Geographic Breakdown
Market Breakdown
Analyst's Credentials
BCC Custom Research
Related BCC Research Reports

## **CHAPTER 2 SUMMARY AND HIGHLIGHTS**

Summary

#### **CHAPTER 3 MARKET OVERVIEW**

Introduction and Roadmap of Laser
Operating Principle of Lasers
Population Inversion
Continuous Wave and Pulsed Lasers
Distributed Feedback Lasers
Mode Locked Lasers

**Market Trends** 

Applications of Lasers

Advantages of Laser over Conventional Technologies
Stringent Government Regulations Pertaining to Marking and Engraving
Lucrative Opportunities in the Untapped Markets of Africa and South America
Increasing Demand for Accuracy and Precision
Growing Applications of VCSELs in Infrared Illumination
VCESL's are Used for Gesture Recognition and 3-D Sensing Technology
High Initial Costs Associated with Laser-Processing Devices

**Technology Conflicts** 

**Future Market Outlook** 

**Quantum Cascade Lasers** 



Directed-Energy and Military Laser Market Ultrafast Lasers

## **CHAPTER 4 LASERS MARKET**

Introduction

Market Breakdown by Type

**Diode Lasers** 

Fiber Laser

Carbon Dioxide Laser

Solid-State Lasers

**Excimer Laser** 

Dye Laser

Other Gas Lasers

Ion Laser

Helium-Neon (HeNe) Laser

Helium-Cadmium Laser

Market Breakdown by Application

## **CHAPTER 5 QUANTUM CASCADE LASER MARKET**

Introduction

Market Dynamics

Drivers

Restraints

Opportunities

Market Breakdown by Type

Fabry-Perot Lasers

Distributed Feedback Lasers

**External Cavity Lasers** 

Market Breakdown by Application

Defense

Automotive

Communications

Healthcare

Industrial Automation

Others

## CHAPTER 6 DIRECTED-ENERGY AND MILITARY LASER MARKET



Introduction

Market Breakdown by Type

Gas Lasers

**Chemical Lasers** 

**Excimer Lasers** 

Fiber Lasers

Solid State Lasers

Others

Market Breakdown by Application

Industrial

Defense

Research

Medical

Others

## **CHAPTER 7 ULTRAFAST LASERS MARKET**

Introduction

Market Breakdown by Technology

Titanium-Sapphire Lasers

**Diode-Pumped Lasers** 

Fiber Lasers

Mode-Locked Diode Lasers

Market Breakdown by Application

Biomedical

**Materials Processing** 

Spectroscopy and Imaging

Science and Research

**Consumer Electronics** 

Automotive

Others

#### **CHAPTER 8 VCSEL MARKET**

Introduction

Market Breakdown by Raw Materials

Gallium Nitride

Gallium Arsenide



Indium Phosphide

Other Materials

Market Breakdown by Application

Optical Fiber Data Transmission

Analog Broadband Signal Transmission

Absorption Spectroscopy

**Laser Printers** 

**Computer Mice** 

Biological Tissue Analysis

Chip Scale Atomic Clocks

Other Applications

## **CHAPTER 9 INDUSTRIAL LASERS MARKET**

Introduction

Market Breakdown by Type

Carbon Dioxide Lasers

Fiber Laser

Nd:YAG Laser

Solid-State Lasers

Disk Laser

Others

Market Breakdown by End-Use Industry

Aerospace and Defense

Consumer Electronics

Construction

Healthcare

Oil and Gas

Other

## **CHAPTER 10 MEDICAL LASERS MARKET**

Introduction

Market Breakdown by End Use

**Ophthalmic Lasers** 

Applications and Technologies

**Diagnostic Applications** 

Therapeutic Applications

Suppliers



Surgical Lasers

Applications and Technologies

Photocoagulation

Laser Thermal Ablation

Photothermolysis

Photoablation

Photodisruption

Photobiostimulation

Photochemical Tissue Bonding (PTB)

Suppliers

**Cosmetic Lasers** 

Applications and Technologies

Thermal Ablation

Photothermolysis

Photodisruption

Photobiostimulation

**Suppliers** 

**Dental Lasers** 

Applications and Technologies

Diagnostics

Thermal Ablation

**PDT** 

Photobiostimulation

**Suppliers** 

**Veterinary Lasers** 

Applications and Technologies

LTA

Photobiostimulation

**Suppliers** 

## **CHAPTER 11 COMPANY PROFILES**

**Companies Listed** 

**AEROTECH** 

**ALMA LASERS** 

**AMPLITUDE SYSTEMES** 

APPLIED COMPANIES INC.

ATTODYNE INC.

**BAE SYSTEMS PLC** 



BIOLASE TECHNOLOGY INC.

**BOEING COMPANY** 

CINCINNATI INC.

CLARK-MXR INC.

COHERENT INC.

CONTINUUM ELECTRO-OPTICS INC.

CORNING INC.

**CRYLAS GMBH** 

CYNOSURE INC.

DAYLIGHT SOLUTIONS

**DILAS DIODENLASER GMBH** 

DORNIER MEDTECH GMBH

DPSS LASERS INC.

ELLEX MEDICAL LASERS LTD.

**EKSPLA UAB** 

EPILOG CORP.

FEMTO BLANC INC.

FINISAR CORP.

FURUKAWA ELECTRIC CO. LTD.

HAMAMATSU PHOTONICS K.K.

HAN'S LASER

IMRA AMERICA INC.

IPG PHOTONICS CORP.

IRIDEX CORP.

JENOPTIK AG

JOHNSON & JOHNSON VISION CARE

L-3 ADVANCED LASER SYSTEMS TECHNOLOGY

LASER QUANTUM LTD.

LOCKHEED MARTIN CORP.

MENLO SYSTEMS GMBH

MILLENNIUM LASER SYSTEMS LTD.

MONTFORT LASER GMBH

NEWPORT CORP.

NICHIA

**NKT PHOTONICS** 

NORTHROP GRUMMAN CORP.

OZ OPTICS LTD.

RAYTHEON COMPANY

RESONETICS LLC



ROFIN-SINAR TECHNOLOGIES INC.
ROBERT BOSCH GMBH
RPMC LASERS, INC.
SCHNEIDER ELECTRIC S.A.
SPARK LASERS
SPI LASERS PLC
SUMITOMO ELECTRIC INDUSTRIES LTD.
SUZHOU TIANHONG LASER CO. LTD.
TOPTICA PHOTONICS AG
TRUMPF GMBH + CO. KG
VASCULAR SOLUTIONS INC.
ZIEMER GROUP AG



## **List Of Tables**

#### LIST OF TABLES

Summary Table: Global Market for Directed-Energy and Military Lasers, by Type,

Through 2024

Table 1: Global Market for Lasers, by Type, Through 2024

Table 2: Global Market for Lasers, by Application, Through 2024

Table 3: Global Market for Quantum Cascade Lasers, by Technology, Through 2024

Table 4: Global Market for Quantum Cascade Laser, by Application, Through 2024

Table 5: Global Market for Directed-Energy and Military Lasers, by Type, Through 2024

Table 6: Global Market for Directed-Energy and Military Lasers, by Application, Through 2024

Table 7: Global Market for Ultrafast Lasers, by Type, Through 2024

Table 8: Global Market for Ultrafast Lasers, by Application, Through 2024

Table 9: Global Market for VCSEL Lasers, by Raw Material Type, Through 2024

Table 10: Global Market for VCSEL Lasers, by Application, Through 2024

Table 11: Global Market for Industrial Lasers, by Type, Through 2024

Table 12: Global Market for Industrial Lasers, by End-Use Industry, Through 2024

Table 13: Global Market for Medical Lasers, by Type, Through 2024

Table 14: Suppliers of Ophthalmic Lasers

Table 15: Suppliers of Surgical Lasers

Table 16: Suppliers of Cosmetic Lasers

Table 17: Suppliers of Dental Lasers

Table 18: Suppliers of Veterinary Lasers



# **List Of Figures**

#### LIST OF FIGURES

Summary Figure: Global Market for Directed-Energy and Military Lasers, by Type, 2018-2024

Figure 1: Global Market for Lasers, by Type

Figure 2: Global Market for Lasers, by Type, 2018-2024

Figure 3: Global Market for Industrial Lasers, by Application, 2018-2024

Figure 4: Global Market for Quantum Cascade Lasers, by Technology

Figure 5: Global Market for Quantum Cascade Lasers, by Technology, 2018-2024

Figure 6: Global Market for Quantum Cascade Lasers, by Application

Figure 7: Global Market for Quantum Cascade Lasers, by Application, 2018-2024

Figure 8: Global Market for Directed-Energy and Military Lasers, by Type, 2018-2024

Figure 9: Global Market for Directed-Energy and Military Lasers, by Application, 2018-2024

Figure 10: Global Market for Ultrafast Lasers, by Type, 2018-2024

Figure 11: Global Market for Ultrafast Lasers, by Application, 2018-2024

Figure 12: Global Market for VCSEL Lasers, by Raw Materials

Figure 13: Global Market for VCSEL Lasers, by Raw Material Type, 2018-2024

Figure 14: Global Market for VCSEL Lasers, by Application

Figure 15: Global Market for VCSEL Lasers, by Application, 2018-2024

Figure 16: Global Market for Industrial Laser Market, by Type

Figure 17: Global Market for Industrial Lasers, by Type, 2018-2024

Figure 18: Global Market for Industrial Laser Market, by End-Use Industry

Figure 19: Global Market for Industrial Lasers, by End-Use Industry, 2018-2024

Figure 20: Global Market for Medical Lasers, by Type, 2018-2024



## I would like to order

Product name: Lasers: Global Markets to 2024

Product link: https://marketpublishers.com/r/LD73380AADDEN.html

Price: US\$ 2,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

## **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/LD73380AADDEN.html">https://marketpublishers.com/r/LD73380AADDEN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

& Conditions at https://marketpublishers.com/docs/terms.html

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms