

Global Markets for Quantum Cascade Lasers

https://marketpublishers.com/r/G2AF9C263D3EN.html

Date: June 2017

Pages: 94

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

ID: G2AF9C263D3EN

Abstracts

The global market for quantum cascade lasers reached \$5.6 billion in 2015. This market is expected to increase from \$6.1 billion in 2016 to \$9.7 billion in 2021 at a compound annual growth rate (CAGR) of 9.7% for 2016-2021.

Communications application market is expected to grow from \$2.0 billion in 2016 to \$3.2 billion in 2021 at a CAGR of 9.3% from 2016 through 2021.

Defense application market is expected to grow from \$631 million in 2016 to \$1.0 billion in 2021 at a CAGR of 10.7% from 2016 through 2021.



Contents

CHAPTER 1 INTRODUCTION

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

CHAPTER 2 SUMMARY AND HIGHLIGHTS

CHAPTER 3 MARKET AND TECHNOLOGY BACKGROUND

Market Definition and Evolution of Quantum Cascade Lasers
Conventional Lasers versus Quantum Cascade Lasers
Quantum Wells
Future Outlook and Expectations
Key Developments in the Field of Lasers
Major Quotes by Key Opinion Leaders
Value Chain

CHAPTER 4 MARKET BREAKDOWN BY TECHNOLOGY TYPE

Introduction

Market Dynamics

Drivers

Need for Improved Safety and Security

Alternate for a Failed Technology

Restraints

Lack of Industrial and Technological Standards

High Cost

Opportunities

Smart Industries for the Future

Fabry-Perot Lasers

Global Markets for Quantum Cascade Lasers



Distributed Feedback Lasers External Cavity Lasers

CHAPTER 5 MARKET BREAKDOWN BY APPLICATION

Introduction

Defense

Automotive

Communications

Healthcare

Industrial Automation

Others

CHAPTER 6 MARKET BREAKDOWN BY REGION

Introduction

Market Dynamics

Drivers

Advancements in the Industrial Market

Global Military Spending in High-Energy Laser Technology

Restraints

Engineering Challenges Involved in Creating Truly Useful and Effective Weapons

Atmospheric Problems Associated with the Use of Laser Weapons

Opportunities

Research and Development Activity and Government Funds

North America

Overview

North American QSL Market by Technology

North American QSL Market by Application

North American QSL Market by Country

Europe

Overview

European QSL Market by Technology

European QSL Market by Application

European QSL Market by Country

Asia-Pacific

Overview

Asia-Pacific QSL Market by Technology

Asia-Pacific QSL Market by Application



Asia-Pacific QSL Market by Country

Rest of the World

Overview

Rest of the World QSL Market by Technology

Rest of the World QSL Market by Application

Rest of the World QSL Market by Region

CHAPTER 7 PATENT REVIEW/ NEW DEVELOPMENTS

Patent Review by Country
List of Important Patents
Significant Quantum Cascade Laser Patents

CHAPTER 8 COMPANY PROFILES

ARDEN PHOTONICS LTD.

BLOCK ENGINEERING

COHERENT INC.

DAYLIGHT SOLUTIONS

DPSS LASERS INC.

EKSPLA UAB

EPILOG LASER INC.

FURUKAWA ELECTRIC CO. LTD.

HAMAMATSU PHOTONICS K.K.

IMRA AMERICA INC.

IPG PHOTONICS CORP.

JENOPTIK LASER GMBH

LUMENTUM HOLDINGS INC.

NEWPORT CORP.

NKT PHOTONICS

NLIGHT CORP.

NOVANTA

ROBERT BOSCH GMBH

ROFIN-SINAR LASER GMBH

TRUMPF GMBH + CO. KG

Overview

Primary Business

Financials

Business Strategies



Overview

Primary Business

Financials

Business Strategies

Overview

Financials

Primary Business

Business Strategies

Research and Development Initiatives

Vertical Integration

Strategic Expansion

Developments

Overview

Primary Business

Financials

Business Strategies

Developments

Business Agreement

Overview

Primary Business

Financials

Business Strategies

Leveraging R&D Activities Across Its Products Portfolio

Focus on Promoting Sales Through Trade Shows

Developments

Primary Business

Financials

Business Strategies

Developments

Overview

Primary Business

Financials

Business Strategies

Developments

Strategic partnerships

Overview

Primary Business

Business Strategies

Developments



Research and Development

Overview

Primary Business

Financials

Business Strategies

Developments

Primary Business

Financials

Business Strategies

Developments

Overview

Primary business

Business Strategies

Developments

Sales Promotion Through Participating in Tradeshows and Exhibitions

Overview

Primary Business

Business Strategies

Developments

Focus on Expanding Business through Strategic Agreements

Primary Business

Financials

Business Strategies

Developments

Overview

Primary Business

Business Strategies

Development

Strategic Expansion

Primary Business

Business Strategies

Developments

Primary Business

Financials

Business Strategies

Developments

Overview

Primary Business

Financials



Business Strategies

Developments

New Product Development

Overview

Primary Business

Financials

Business Strategies

Developments

New Product Development

Primary Business

Business Strategies

Developments

Primary Business

Financials

Business Strategies

Developments

Research and Development

Sales promotion through participating in tradeshows and exhibitions



List Of Tables

LIST OF TABLES

Summary Table Global Market for Quantum Cascade Lasers, by Application, Through 2021

Table 1 Global Market for Fabry-Perot Lasers, by Application, Through 2021

Table 2 Global Market for Fabry-Perot Lasers, by Region, Through 2021

Table 3 Global Market for Distributed Feedback Lasers, by Application, Through 2021

Table 4 Global Market for Distributed Feedback Lasers, by Region, Through 2021

Table 5 Global Market for External Cavity Lasers, by Application, Through 2021

Table 6 Global Market for External Cavity Lasers, by Region, Through 2021

Table 7 Global Market for Quantum Cascade Lasers in Defense Applications, by Technology, Through 2021

Table 8 Global Market for Quantum Cascade Lasers in Defense Applications, by Region, Through 2021

Table 9 Global Market for Quantum Cascade Lasers in Automotive Applications, by Technology, Through 2021

Table 10 Global Market for Quantum Cascade Lasers in Automotive Applications, by Region, Through 2021

Table 11 Global Market for Quantum Cascade Lasers in Communications Applications, by Technology, Through 2021

Table 12 Global Market for Quantum Cascade Lasers in Communications Applications, by Region, Through 2021

Table 13 Global Market for Quantum Cascade Lasers in Healthcare Applications, by Technology, Through 2021

Table 14 Global Market for Quantum Cascade Lasers in Healthcare Applications, by Region, Through 2021

Table 15 Global Market for Quantum Cascade Lasers in Industrial Automation Applications, by Technology, Through 2021

Table 16 Global Market for Quantum Cascade Lasers in Industrial Automation Applications, by Region, Through 2021

Table 17 Global Market for Quantum Cascade Lasers in Other Applications, by Technology, Through 2021

Table 18 Global Market for Quantum Cascade Lasers in Other Applications, by Region, Through 2021

Table 19 North American Market for Quantum Cascade Lasers, by Technology, Through 2021

Table 20 North American Market for Quantum Cascade Lasers, by Application, Through



2021

Table 21 North American Market for Quantum Cascade Lasers, by Country, Through 2021

Table 22 European Market for Quantum Cascade Lasers, by Technology, Through 2021

Table 23 European Market for Quantum Cascade Lasers, by Application, Through 2021

Table 24 European Market for Quantum Cascade Lasers, by Country, Through 2021

Table 25 Asia-Pacific Market for Quantum Cascade Lasers, by Technology, Through 2021

Table 26 Asia-Pacific Market for Quantum Cascade Lasers, by Application, Through 2021

Table 27 Asia-Pacific Market for Quantum Cascade Lasers, by Country, Through 2021

Table 28 Rest of the World Market for Quantum Cascade Lasers, by Technology,

Through 2021

Table 29 Rest of the World Market for Quantum Cascade Lasers, by Application, through 2021

Table 30 Rest of the World Market for Quantum Cascade Lasers, by Region, Through 2021

Table 31 U.S. Patents on Quantum Cascade Lasers, Granted, 2015 to March 2017

Table 32 Block Engineering Recent Developments

Table 33 Coherent Recent Developments

Table 34 Daylight Solutions Recent Developments

Table 35 DPSS Lasers Recent Developments

Table 36 EKSPLA UAB Recent Developments

Table 37 Epilog Laser Developments

Table 38 Furukawa Electric Developments

Table 39 Hamamatsu Photonics Developments

Table 40 IMRA America Developments

Table 41 IPG Photonics Developments

Table 42 Jenoptik Laser Group Developments

Table 43 Lumentum Holdings Developments

Table 44 Newport Developments

Table 45 NKT Photonics Developments

Table 46 nLight Developments

Table 47 Novanta Developments

Table 48 Robert Bosch Developments

Table 49 Rofin-Sinar Laser Developments

Table 50 Trumpf Developments



List Of Figures

LIST OF FIGURES

Summary Figure Global Market for Quantum Cascade Lasers, by Application, 2015-2021

Figure 1 Value Chain of Quantum Cascade Lasers

Figure 2 Global Market for Quantum Cascade Lasers, by Technology

Figure 3 Global Market for Fabry-Perot Lasers, by Application, 2015-2021

Figure 4 Global Market for Fabry-Perot Lasers, by Region, 2015-2021

Figure 5 Global Market for Distributed Feedback Lasers, by Application, 2015-2021

Figure 6 Global Market for Distributed Feedback Lasers, by Region, 2015-2021

Figure 7 Global Market for External Cavity Lasers, by Application, 2015-2021

Figure 8 Global Market for External Cavity Lasers, by Region, 2015-2021

Figure 9 Global Market for Quantum Cascade Laser by Application

Figure 10 Global Market for Quantum Cascade Lasers in Defense Applications, by Technology, 2015-2021

Figure 11 Global Market for Quantum Cascade Lasers in Defense Applications, by Region, 2015-2021

Figure 12 Global Market for Quantum Cascade Lasers in Automotive Applications, by Technology, 2015-2021

Figure 13 Global Market for Quantum Cascade Lasers in Automotive Applications, by Region, 2015-2021

Figure 14 Global Market for Quantum Cascade Lasers in Communications Applications, by Technology, 2015-2021

Figure 15 Global Market for Quantum Cascade Lasers in Communications Applications, by Region, 2015-2021

Figure 16 Global Market for Quantum Cascade Lasers in Healthcare Applications by Technology, 2015-2021

Figure 17 Global Market for Quantum Cascade Lasers in Healthcare Applications, by Region, 2015-2021

Figure 18 Global Market for Quantum Cascade Lasers in Industrial Automation Applications, by Technology, 2015-2021

Figure 19 Global Market for Quantum Cascade Lasers in Industrial Automation Applications by Region, 2015-2021

Figure 20 Global Market for Quantum Cascade Lasers in Other Applications, by Technology, 2015-2021

Figure 21 Global Market for Quantum Cascade Lasers in Other Applications, by Region, 2015-2021



Figure 22 Global Market for Quantum Cascade Lasers, by Region

Figure 23 North American Market for Quantum Cascade Lasers, by Technology, 2015-2021

Figure 24 North American Market for Quantum Cascade Lasers, by Application, 2015-2021

Figure 25 North American Market for Quantum Cascade Lasers, by Country, 2015-2021

Figure 26 European Market for Quantum Cascade Lasers, by Technology, 2015-2021

Figure 27 European Market for Quantum Cascade Lasers, by Application, 2015-2021

Figure 28 European Market for Quantum Cascade Lasers, by Country, 2015-2021

Figure 29 Asia-Pacific Market for Quantum Cascade Lasers, by Technology, 2015-2021

Figure 30 Asia-Pacific Market for Quantum Cascade Lasers, by Application, 2015-2021

Figure 31 Asia-Pacific Market for Quantum Cascade Lasers, by Country, 2015-2021

Figure 32 Rest of the World Market for Quantum Cascade Lasers, by Technology, 2015-2021

Figure 33 Rest of the World Market for Quantum Cascade Lasers, by Application, 2015-2021

Figure 34 Rest of the World Market for Quantum Cascade Lasers, by Region, 2015-2021

Figure 35 Shares of U.S. Patents on Quantum Cascade Lasers, U.S. vs Outside the U.S., 2015-2017

Figure 36 Shares of U.S. Patents on Quantum Cascade Lasers by Year, 2013 to 2016



I would like to order

Product name: Global Markets for Quantum Cascade Lasers

Product link: https://marketpublishers.com/r/G2AF9C263D3EN.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

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G2AF9C263D3EN.html

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

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