

Military Laser System Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

<https://marketpublishers.com/r/MCE56AFF269EEN.html>

Date: December 2024

Pages: 220

Price: US\$ 4,850.00 (Single User License)

ID: MCE56AFF269EEN

Abstracts

The Global Military Laser System Market, valued at USD 5.7 billion in 2024, is projected to grow at a CAGR of 9.6% through 2034. The expansion of this market is driven by the rising demand for precision-guided technologies among military forces worldwide, as they seek advanced solutions to address emerging threats such as drones, missiles, and other modern weaponry. Laser systems are favored for their precision, cost-effectiveness, and ability to target moving objects under various environmental conditions. Furthermore, advancements in high-energy lasers and directed energy weapons are transforming traditional defense strategies, playing a significant role in the market's growth.

Artificial intelligence (AI) is increasingly integrated into military laser systems, enhancing their capability to operate autonomously. With AI, lasers can automatically identify and target threats, analyze situations in real-time, and optimize energy consumption. Manufacturers are also focusing on miniaturizing these systems, which not only improves their portability but also reduces operational costs, making them more affordable. Hybrid systems, which combine lasers with radar and sensors, are another growing trend, enhancing situational awareness and decision-making in high-stakes environments. The demand for laser systems continues to rise as armed forces seek non-kinetic solutions to counter evolving threats, including hypersonic missiles, drone swarms, and cyber-attacks.

The military laser system market is segmented by product type, with laser weapons, laser designators, lidar, laser rangefinders, ring laser gyroscopes, and laser altimeters all playing vital roles. Among these, laser weapons are expected to see significant growth, accounting for a considerable share of the market. These weapons are

increasingly integrated into various defense platforms, such as drones, fighter jets, naval ships, and ground vehicles. Their ability to eliminate targets with high precision and low operational costs makes them invaluable in modern military operations.

The market also spans several key end-use sectors, including land, airborne, naval, and space applications. The naval segment is expected to experience substantial growth as high-energy lasers become integral components of naval defense systems. These lasers offer faster response times, greater accuracy, and lower costs compared to traditional munitions. The combination of laser systems with radar and infrared sensors further strengthens naval vessels' ability to detect and track threats in diverse marine environments.

North America, particularly the United States, dominates the military laser system market and is projected to surpass USD 6 billion by 2034. The U.S. military's continued investments in directed energy weapons and its growing focus on counter-drone technology are key factors driving this market's expansion. As defense agencies continue to innovate and upgrade their defense capabilities, demand for advanced laser systems is expected to rise steadily across various military sectors.

Contents

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Market scope & definitions
- 1.2 Base estimates & calculations
- 1.3 Forecast calculations
- 1.4 Data sources
 - 1.4.1 Primary
 - 1.4.2 Secondary
 - 1.4.2.1 Paid sources
 - 1.4.2.2 Public sources

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry synopsis, 2021-2034

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
 - 3.1.1 Factor affecting the value chain
 - 3.1.2 Profit margin analysis
 - 3.1.3 Disruptions
 - 3.1.4 Future outlook
 - 3.1.5 Manufacturers
 - 3.1.6 Distributors
- 3.2 Supplier landscape
- 3.3 Profit margin analysis
- 3.4 Key news & initiatives
- 3.5 Regulatory landscape
- 3.6 Impact forces
 - 3.6.1 Growth drivers
 - 3.6.1.1 Increasing demand for precision weapons
 - 3.6.1.2 Technological advancements in high-energy lasers and directed energy weapons
 - 3.6.1.3 Rise in unconventional threats such as unmanned aerial vehicles (UAVs), swarming drones, and hypersonic missiles
 - 3.6.1.4 Integration of artificial intelligence (AI) and autonomous systems into laser technology

3.6.1.5 Miniaturization of laser systems and the development of more portable platforms

3.6.2 Industry pitfalls & challenges

3.6.2.1 High development and operational costs

3.6.2.2 Regulatory and legal concerns

3.7 Growth potential analysis

3.8 Porter's analysis

3.9 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2024

4.1 Introduction

4.2 Company market share analysis

4.3 Competitive positioning matrix

4.4 Strategic outlook matrix

CHAPTER 5 MARKET ESTIMATES & FORECAST, BY OUTPUT POWER, 2021-2034 (USD MILLION & UNITS)

5.1 Key trends

5.2 100 kW

CHAPTER 6 MARKET ESTIMATES & FORECAST, BY PRODUCT, 2021-2034 (USD MILLION & UNITS)

6.1 Key trends

6.2 Laser designator

6.3 Lidar

6.4 3D scanning

6.5 Laser weapon

6.6 Laser range finder

6.7 Ring laser gyroscope

6.8 Laser altimeter

CHAPTER 7 MARKET ESTIMATES & FORECAST, BY TECHNOLOGY, 2021-2034 (USD MILLION & UNITS)

7.1 Key trends

7.2 Solid-state laser

- 7.3 Fiber laser
- 7.4 Semiconductor laser
- 7.5 Gas laser
- 7.6 Liquid laser
- 7.7 Free-electron laser

CHAPTER 8 MARKET ESTIMATES & FORECAST, BY FUNCTION, 2021-2034 (USD MILLION & UNITS)

- 8.1 Key trends
- 8.2 Target designation and ranging
- 8.3 Navigation, guidance, & control
- 8.4 Defensive countermeasures
- 8.5 Communication system
- 8.6 Directed energy weapons

CHAPTER 9 MARKET ESTIMATES & FORECAST, BY END USE APPLICATION, 2021-2034 (USD MILLION & UNITS)

- 9.1 Key trends
- 9.2 Land
 - 9.2.1 Armored vehicles
 - 9.2.2 Dismounted soldier system
 - 9.2.3 Artillery system
- 9.3 Airborne
 - 9.3.1 Attack helicopters
 - 9.3.2 Fighter aircraft
 - 9.3.3 Tactical UAVs
- 9.4 Naval
 - 9.4.1 Combat ships
 - 9.4.2 Submarines
 - 9.4.3 Unmanned surface vehicles
- 9.5 Space
 - 9.5.1 Satellite
 - 9.5.2 Space-based interceptors
 - 9.5.3 Earth to space weapons

CHAPTER 10 MARKET ESTIMATES & FORECAST, BY REGION, 2021-2034 (USD MILLION & UNITS)

10.1 Key trends

10.2 North America

10.2.1 U.S.

10.2.2 Canada

10.3 Europe

10.3.1 UK

10.3.2 Germany

10.3.3 France

10.3.4 Italy

10.3.5 Spain

10.3.6 Russia

10.4 Asia Pacific

10.4.1 China

10.4.2 India

10.4.3 Japan

10.4.4 South Korea

10.4.5 Australia

10.5 Latin America

10.5.1 Brazil

10.5.2 Mexico

10.6 MEA

10.6.1 South Africa

10.6.2 Saudi Arabia

10.6.3 UAE

CHAPTER 11 COMPANY PROFILES

11.1 BAE Systems

11.2 Boeing

11.3 Elbit Systems

11.4 L3Harris Technologies

11.5 Leonardo

11.6 Lockheed Martin

11.7 MBDA

11.8 Newport

11.9 Northrop Grumman

11.10 Raytheon Technologies

11.11 Rheinmetall

11.12 Safran
11.13 Textron
11.14 Thales

I would like to order

Product name: Military Laser System Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Product link: <https://marketpublishers.com/r/MCE56AFF269EEN.html>

Price: US\$ 4,850.00 (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 <https://marketpublishers.com/r/MCE56AFF269EEN.html>