



Exploration of Photonics Markets

Lasers for Defense: Technologies, Applications and Market Trends



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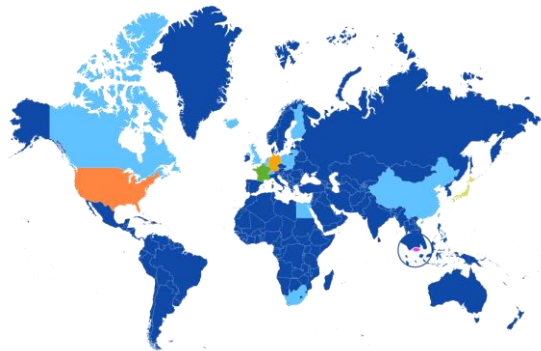
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EPIC Online Technology Meeting on Laser for Defense Applications

About TEMATYS

Founded in 2010 in Paris, France, TEMATYS is committed to provide the most accurate and updated information on markets and applications of photonic technologies.



20+ Countries
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(24%) International groups
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(20%) Research organizations
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Market research © Industry reports © Product positioning © Business plans © R&D collaboration

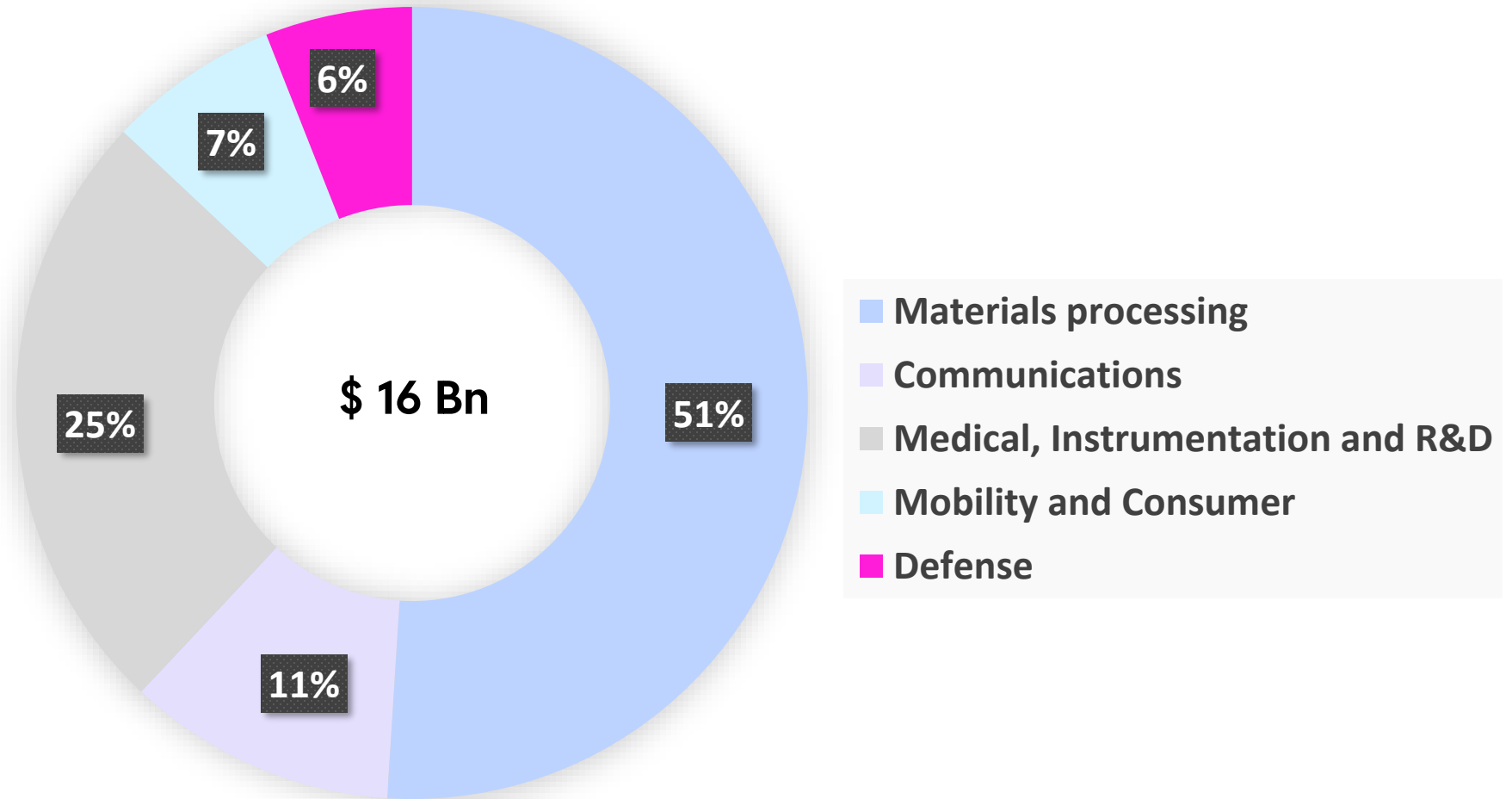


About TEMATYS



In 2026 TEMATYS AND YOLE released the second edition of the Global Lasers Market report. This study contains a detailed presentation in terms of revenues, ASPs and number of units sold of all commercially available laser technologies and their applications. It also includes an analysis of the factors and industry trends that influence the market of lasers, as well as a five-year market forecast.

The global market of laser sources for 2025 - Share by application





Exploration of Photonics Markets

Almost immediately after their invention in the early 1960s, lasers were investigated for applications in defense. Due to their unique properties, it didn't take long before these devices found their way into systems that are critical to modern defense infrastructure. Nowadays, laser sources are core components of most electro-optical assemblies deployed in land, sea and air.

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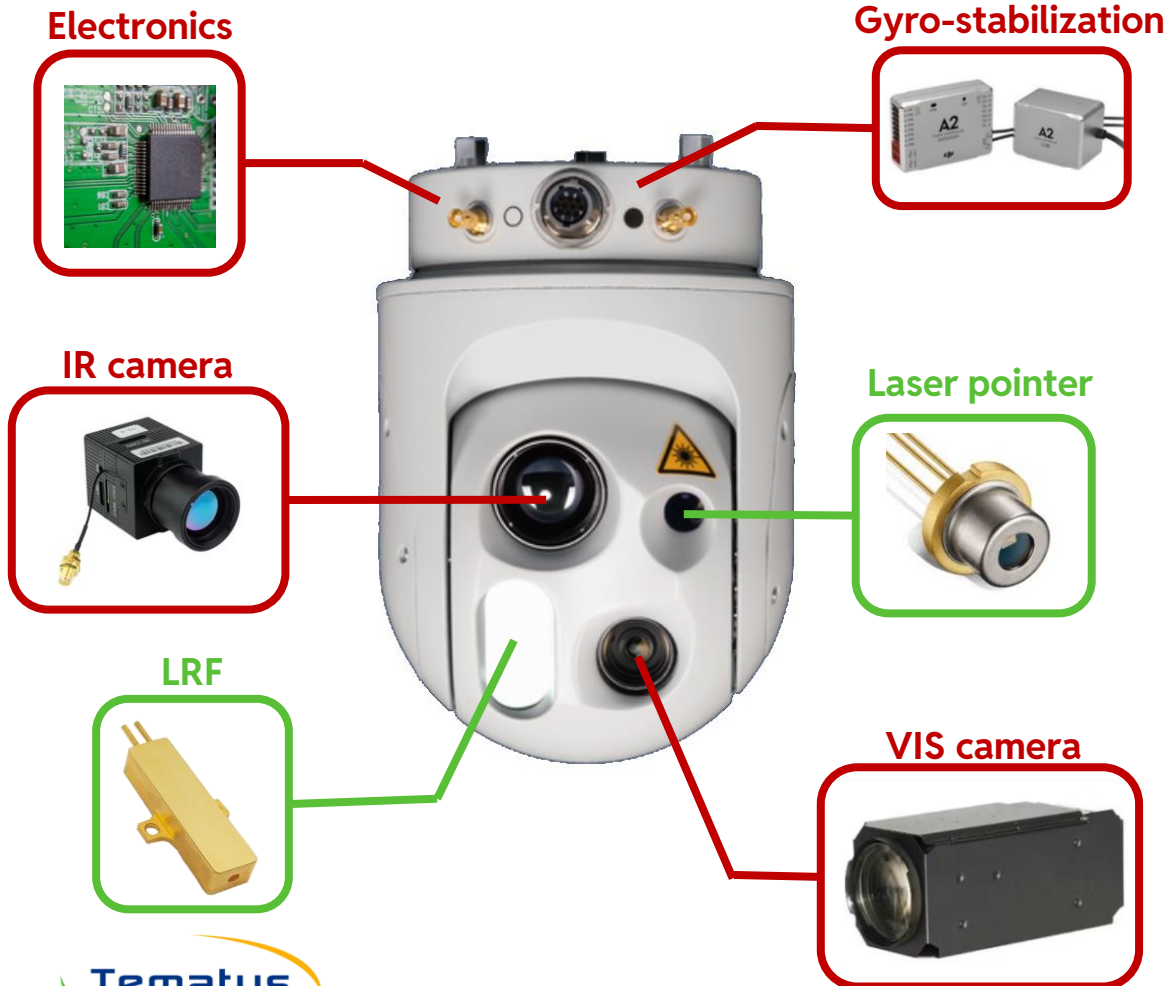
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LASERS FOR DEFENSE 2026:

TECHNOLOGIES, APPLICATIONS AND MARKET TRENDS



Laser sources and systems



o What you will find in the report:

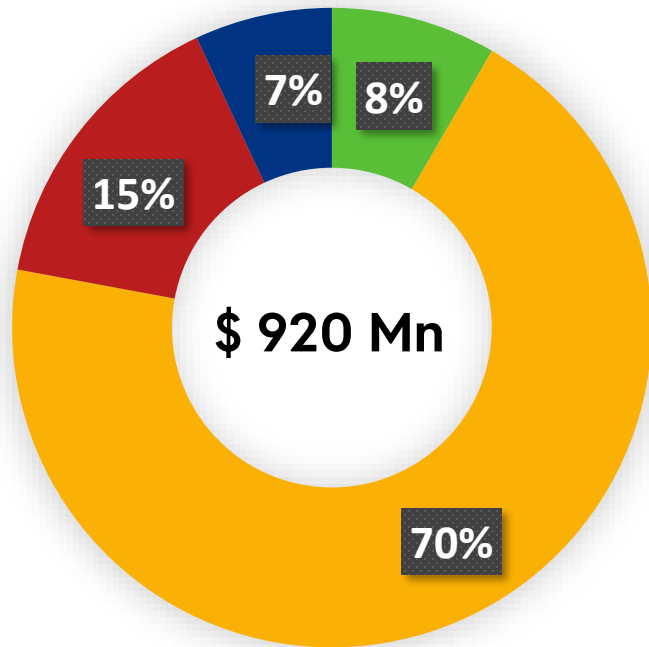
- o Presentation of the global market of **lasers sources for defense** for 2025 and its estimation for 2026, segmented by the most common **technologies** in the market and their **applications**.
- o Definition of **laser sources**, systems and sub-systems and presentation of the value chain of lasers.
- o Presentation of market figures such as **revenues**, **average selling price (ASP)** and **number of units sold** by laser technologies and applications in 50+ segments.
- o Discussion of the factors which affected the **evolution of the global market of lasers for defense and trends** of the broader industry.
- o Analysis of selected market subsegments and a detailed forecast for the period 2026-2031.

Technologies and systems of laser sources for Defense

Laser technologies Defense systems	Diode lasers	DPSSLs	Fiber lasers	HeNe ring lasers	QCLs
Firearm scopes and sights	X	X			
Boresighters	X				
Dazzlers	X	X			
Portable rangefinders	X	X	X		
Vehicle rangefinders	X	X	X		
Naval rangefinders		X	X		
Aircraft/UAV rangefinders	X	X	X		
Portable target designators		X			
Aircraft/UAV designators and targeting pods	X	X			
Gyroscopes	X			X	
Fiber optic guided UAVs	X				
Laser weapons			X		
IRCMs					X
FSO communications	X				

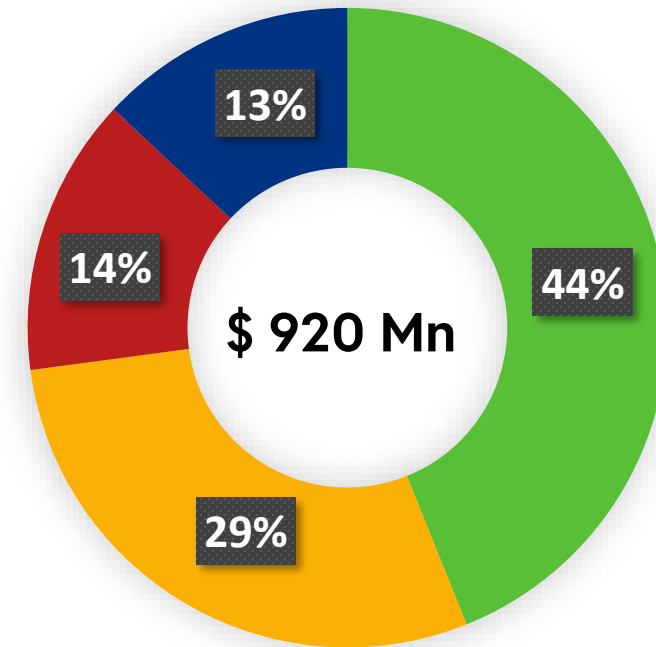
The global market of laser sources for Defense

Market share by laser technology



■ Diode lasers ■ DPSSLs ■ Fiber lasers ■ Other

Market share by system type



■ Lasers for rangefinders ■ Lasers for designators
■ Lasers for DEWs ■ Other

Drone warfare evolution

WWII



Introduction of radioplanes

The Cold War



Drone development in the US and USSR mostly for reconnaissance missions

1990s – 2010s



Highly sophisticated and expensive to produce and operate. Used predominantly in specialized strike missions and ISR

2020s



Democratization of drone warfare, production > 10 Mn units/year, EO systems critical for the accomplishment of different missions in air, sea and land

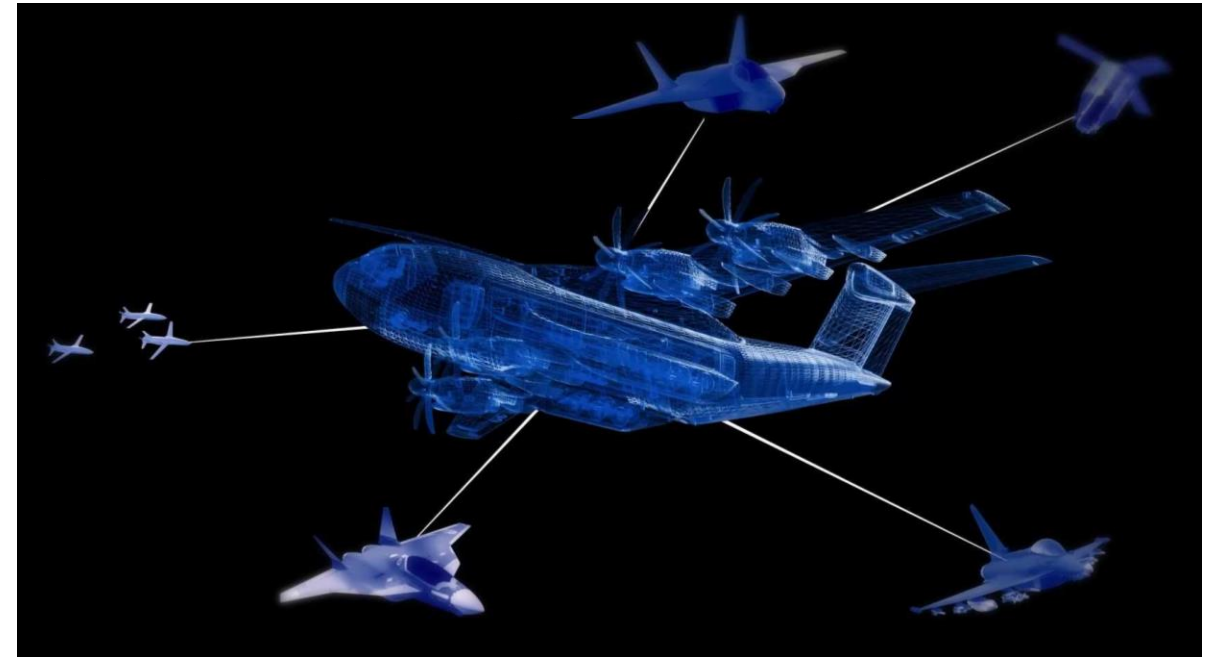
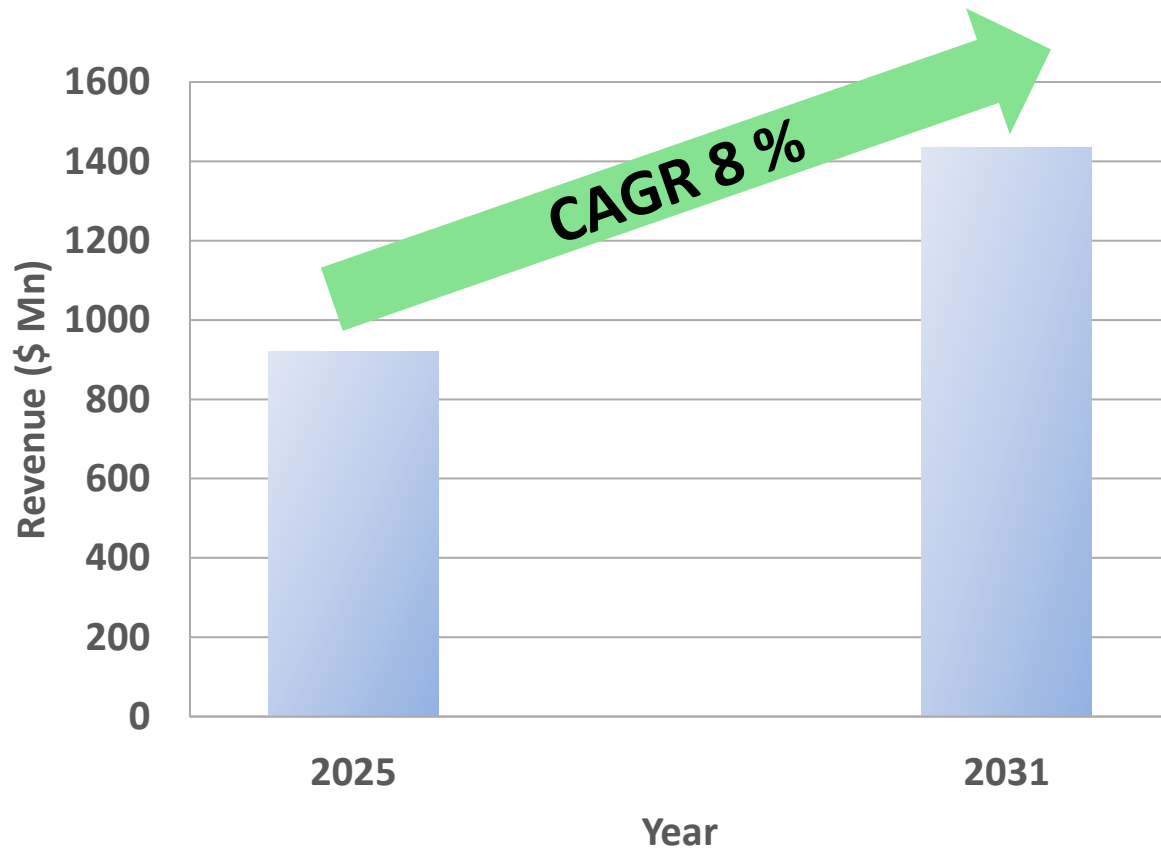
The evolution of drone warfare drives the global market of lasers for defense

Rapid development of LDEWs

- Traditional air defense systems based on missiles and cannons have high operational costs and can be easily overwhelmed by coordinated drone swarm attacks.
- Two air defense approaches:
 - **Drone-on-drone**
 - **DEWs**
- Manufacturers of laser sources for industrial processes, are shifting their business towards defense applications.
- The global market size of lasers for DEWs was estimated near \$ 130 Mn. The CAGR of this market is expected to be near 22% for the following years.



2026 – 2031 evolution of the global market of lasers for Defense



Ongoing digital transformation of modern tactics and the IoBT

TEMATYS reports and publications list

	Lasers for Defense 2026: Technologies, Applications and Market Trends	2026
	Studying Photonics Markets using AI	2026
	Global Market of Lasers 2026: Technologies, Markets, Applications and Future Trends	2026
	Hyperspectral and Multispectral Imaging 2025: Technologies, Applications and Market Trends	2025
	Fiber Lasers 2025: Technologies, Applications and Market Trends	2025
	Ultrafast Lasers 2025: Technologies, Applications and Market Trends	2025
	LASER SOURCES: GLOBAL LASER MARKET INDEX (GLMI) (Quarterly publication)	2024 -
	EQUITY INVESTORS AND THE PHOTONICS INDUSTRY (EIPi) - UPDATE 2024	2024

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