



**exail**

**STABILIZED  
PLATFORMS**

# WHY CHOOSE EXAIL GYROSTABILIZED PLATFORM?

## **Industrial excellence**

At Exail, we harness the most advanced and proven technologies, implementing critical systems only when they've reached full technological maturity through rigorous testing and trials. Our systems are meticulously designed to minimize maintenance requirements, ensuring optimal performance and longevity.

## **Performance and robustness**

Exail refuses to compromise on technology. We understand the importance of achieving peak performance without sacrificing the critical requirements of terrestrial use. Through substantial investments in R&D, our solutions consistently deliver the highest Line Of Sight (LOS) accuracy while remaining robust enough to withstand the most extreme operating conditions.

## **Scalability and ease-of-use**

Exail systems are characterized by their scalability and ease-of-use. With strong hardware, software, and interface commonalities, our platforms offer significant savings in integration, installation, configuration management, logistics, training, and maintenance costs. This flexibility allows us to tailor our products precisely to suit your payload type, weight, and size requirements.

## **ITAR-free solutions**

All of our off-the-shelf stabilized platforms are ITAR-free, demonstrating our commitment to international compliance and accessibility. By utilizing cutting-edge hardware and commercial off-the-shelf (COTS) software whenever possible, we not only enhance performance but also minimize costs for our valued clients.

# exail at a glance

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**30**

YEARS OF  
EXPERIENCE

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**250+**

MILLION EUROS  
OF TURNOVER

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**80%**

OF TURNOVER  
ACHIEVED ABROAD

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**1750+**

EMPLOYEES

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**30K+**

FIBER-OPTIC  
GYROSCOPES SOLD

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**20%**

OF TURNOVER  
REINVESTED  
EACH YEAR IN R&D

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**70+**

NAVIES AND  
ARMIES SERVED

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DELIVERING OVER

**500**

CUSTOMERS  
EVERY YEAR

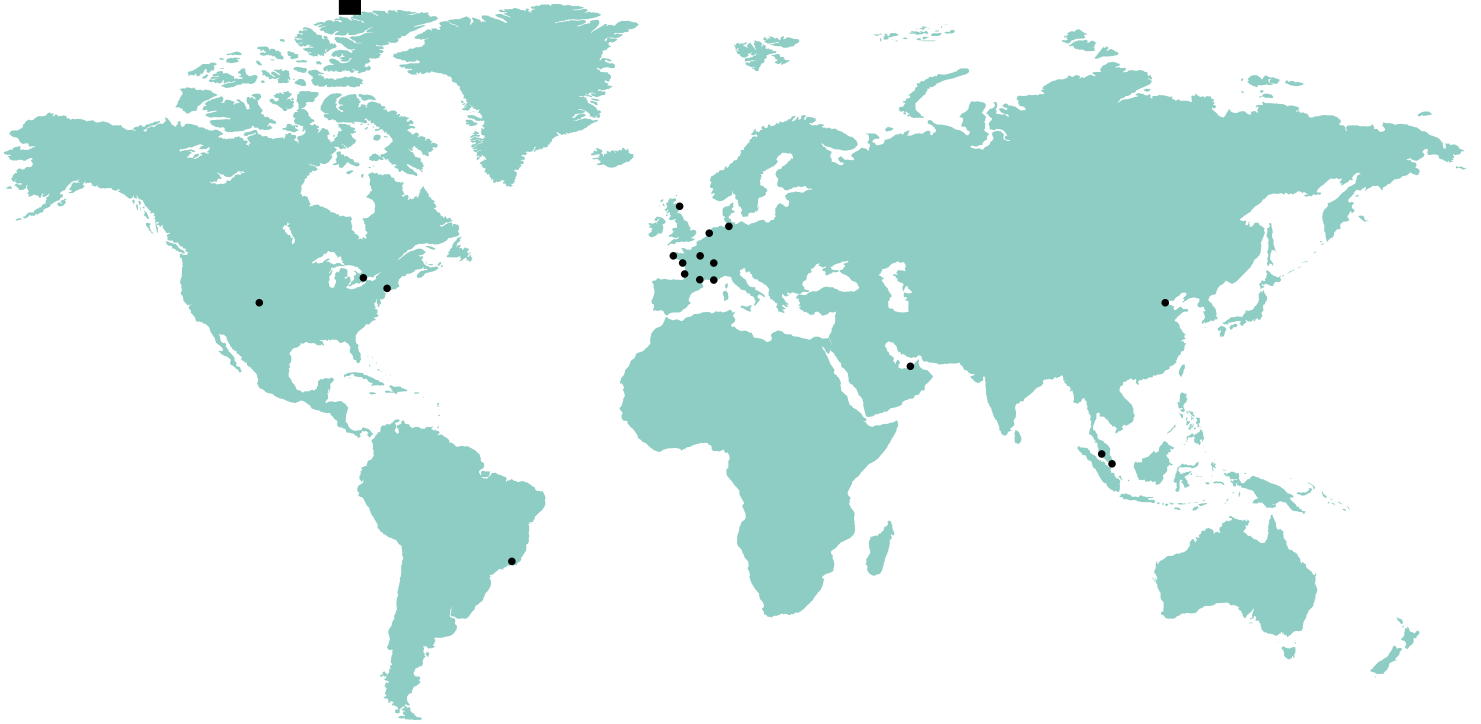
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**24/7**

TECHNICAL  
SUPPORT

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# our global footprint



[www.exail.com](http://www.exail.com)

**exail**

# COMPREHENSIVE STABILIZED PLATFORMS FOR MULTIPLE PLATFORMS AND PAYLOADS

With over three decades of expertise in mechatronics and motion simulation, Exail stands as an independent leader in platform stabilization and pan & tilt solutions. Our commitment to excellence drives us to produce a range of highly reliable and accurate ITAR-free stabilized platforms tailored to meet both the needs and budget requirements of our customers. These platforms serve diverse land and naval applications, including security, surveillance, reconnaissance, and targeting, offering unparalleled stability and precision for crucial operations.



**Stab Ceos**  
Two-axis gyrostabilized platform for single payload



**Stab Neos**  
Two-axis gyrostabilized platform for multiple payloads



**Stab Leos Series**  
Highly accurate two-axis gyrostabilized platform for optronic sensors

<b>Main characteristics &amp; performance</b>	2-axes	2-axes	2-axes	2-axes
<b>Gyrostabilized Line-Of-Sight</b>	< 1 mrad	< 1 mrad	< 100 $\mu$ rad (with low drift MEMS gyro)	< 20 $\mu$ rad (with FOG gyro)
<b>Type of payload</b>	In one piece	One, two or three pieces	In one piece	In one piece
<b>Nominal payload (ground fixed system) (up to/kg)</b>	30	60	25	40
<b>Nominal payload (ground mobile system) (up to/kg)</b>	15	40	•	20
<b>Position accuracy</b>	Azimuth $\leq 0.05^\circ$ Elevation $\leq 0.01^\circ$	$\leq 0.01^\circ$	$\leq 0.01^\circ$	$\leq 0.01^\circ$
<b>Angular speed (up to <math>^\circ</math>/sec)</b>	60	60	115	120
<b>Angular acceleration (up to <math>^\circ</math>/sec)</b>	60	90	115	150
<b>Dimensions (L x l x H in mm)</b>	320 x 165 x 385 (without arm)	285 x 230 x 535 (with bridge)	Ext $\varnothing$ 379 x 365 Intrusion $\varnothing$ 120 x 135	Diameter 530 x 540
<b>Weight (kg)</b>	< 13	< 25	< 25	< 46

# SITUATIONAL AWARENESS, SECURITY AND SURVEILLANCE

## Stab Ceos: cost-effective stabilization for enhanced surveillance

Stab Ceos offers a cost-effective solution for sharp imagery in situational awareness, security, and surveillance applications. With a lightweight design and a 15kg single payload capacity, it can be easily mounted on UGVs, tactical vehicles, and infantry fighting vehicles. Compatible with stationary masts, it is a formidable choice for equipping entire vehicle fleets to secure military bases, frontlines, and coastal borders.

## Stab Neos: versatile stabilization for multi-payload precision

Stab Neos is designed to carry multiple payloads on the move and in harsh environments, from optical sensors to rocket pods and antennas, offering flexibility for complex systems. Its modular design makes it ideal for defense applications requiring diverse payloads and precise stabilization.

## Comprehensive monitoring through 360° coverage

Our platforms offer full 360° rotation, providing comprehensive monitoring of surrounding areas. Whether on stationary platforms or mobile vehicles, Exail Stab Neos and Ceos enable operators to survey large areas and track multiple targets simultaneously with precision.

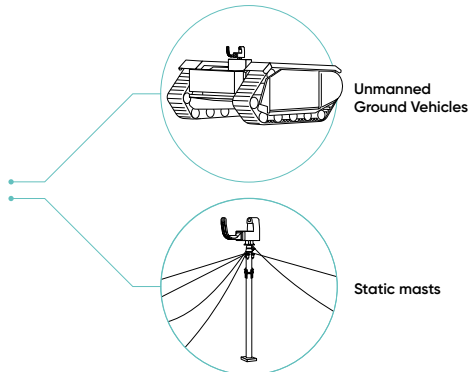
## Enhanced surveillance through unmatched stability

Exail Stab Neos and Ceos gyrostabilized platforms offer unmatched stability, ensuring smooth and steady operation in dynamic environments. With advanced gyro stabilization, they minimize vibration and camera shake, providing clear imagery for enhanced surveillance and situational awareness.

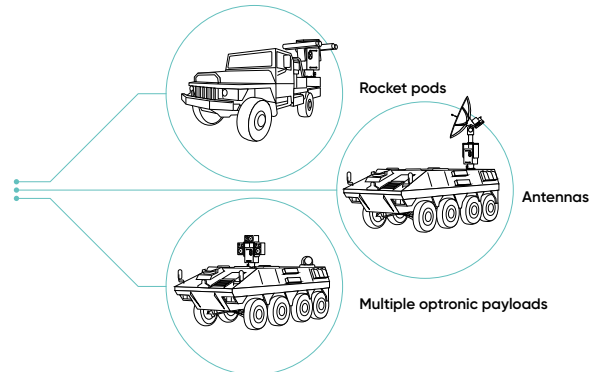
## Integrated sensors for enhanced detection

Exail Stab Neos and Ceos seamlessly integrate with various sensors and imaging systems, enhancing detection capabilities for security and surveillance operations. From high-resolution cameras to thermal imaging, our platforms enable real-time threat detection and response.

### Stab Ceos



### Stab Neos



# OBSERVATION, RECONNAISSANCE AND TARGETING

## Stab Leos: exceptional gyrostabilization for demanding optronics

Exail Leos Series gyrostabilized platforms enable high resolution active sensors, including demanding optronics and cameras to maintain their focus accurately in challenging environments and dynamic conditions.

- Leos S offers exceptional gyrostabilization with a line of sight of  $< 100 \mu\text{rad}$ , ensuring smooth and jitter-free observations and targeting in challenging conditions.
- Leos L provides unmatched stabilization down to  $20 \mu\text{rad}$ , guaranteeing precise and reliable results for on-the-move optronic sensors with a position accuracy of  $0.01^\circ$ .

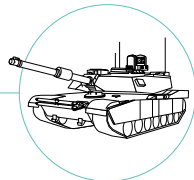
## Seamless integration for defense platforms

Leos S seamlessly integrates into a wide range of sea-based and land defense mobile platforms, including armored personnel carriers, infantry fighting vehicles, and main battle tanks. Its compact size ensures agility and maneuverability for missions requiring quick adaptability.

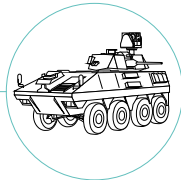
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### Stab Leos



Main battle tanks  
Stab Leos L



Infantry fighting vehicles  
Stab Leos S

## Powerful compact design

Leos Series delivers powerful performance in a compact  $\varnothing 379 \times 365$  mm cylinder, accommodating payloads up to 25 kg on the move. Despite its smaller size, it ensures uncompromising stability and accuracy for high-demanding optronics applications.

## Unparalleled stability

Leos L, a larger and more robust two-axis platform, delivers unmatched performance in demanding defense applications requiring absolute stability and accuracy, providing defense professionals with greater situational awareness and operational advantage.

- Position accuracy of  $0.01^\circ$  enables swift and precise positioning
- Angular speed of up to  $120^\circ/\text{s}$  and acceleration of up to  $150^\circ/\text{s}^2$  extend detection, reconnaissance, and identification (DRI) ranges

## Superior performance in extreme conditions

Built to withstand extreme shocks, vibrations, temperatures, and environmental factors, Leos Series meets various industry and military standards, ensuring dependable performance for demanding naval and land defense missions.



# OSI-ONE, A POWERHOUSE OF INNOVATION

In collaboration with the Thales and Nexter teams, Exail has developed a new generation of OSI-ONE stabilised platform capable of withstanding heavy shocks caused by cannon fire. This project will equip the French Navy's new generation of fleet. Thanks to its flexibility, the platform can be on both fleets and land vehicles.

## Unfailing efficiency

With its fire-control system integrated into a lightweight, non-intrusive turret, its advanced algorithms, its powerful barrel and its automatic ammunition management system, providing the best possible response and efficiency for the operator.

## 30 years in mechatronic expertise

Exail stands out as an independent leader in platform stabilization and pan&tilt solutions, producing a range of highly reliable and accurate stabilized platforms sensitive to both customer's needs and budget requirements.

## Dedicated to missions

With its dual ground-to-air and ground-to-ground capability, RapidFire is the perfect answer to protecting surface ships against air and ground threats, as well as critical infrastructure and areas on the ground.

