

Patria TREMOS

The Reborn Traditional Mortar System with enhanced mobility



DEFENCE AND WEAPON SYSTEMS

PROTECTED MOBILITY



SUSTAINMENT SOLUTIONS



DEFENCE AND WEAPON SYSTEMS



EXTREME SURVIVABILITY

Finland is known for high technology and extreme resilience. Our harsh nature and limited resources have pushed us to learn and innovate efficiently. Thorough preparation for the future is the backbone of our culture.

Patria is a modern and international defence and technology company with over 100 years of experience. We use resources wisely, create innovative solutions and build intelligent systems that provide extreme survivability in any conditions. We work with our customers throughout the entire lifecycle to ensure maximum value. Honest and straightforward co-operation is at the core of our work.

We build exceptional partnerships that last through critical operations. That's what it takes when you stand for your sovereignty. Trust us, we've been there.

QUALITY AND SIMPLICITY

In a world brimming with fleeting trends and overengineered solutions, we stand apart by offering tools built with a singular focus: unwavering reliability and uncompromising quality.

We believe in the power of simplicity. Our products are well-designed, robustly constructed, and thoroughly tested to perform their intended task flawlessly, every single time.

Our philosophy is simple: true innovation should help, not complicate. Driven by dedicated research, we develop advanced technologies for real results. Our straightforward approach makes the difference. Engineered for a single purpose - Yours.

Patria - Extreme conditions embedded.



Patria TREMOS is a highly mobile evolution of the traditional mortar system, designed to meet the demands of modern and future warfare where rapid deployment, high mobility, and precision firepower are essential. Thanks to its modular integration architecture, Patria TREMOS can be seamlessly installed on a wide range of vehicle platforms. It supports the use of existing mortar tubes, ammunition, and ballistic tables, ensuring compatibility and ease of adoption.

The system offers a robust and cost-effective modernization path for smoothbore mortars, significantly enhancing their accuracy and responsiveness. Equipped with an Inertial Navigation Unit (INU) and Battle Management System (BMS) connectivity, Patria TREMOS ensures first-round precision. Its proven recoil mitigation technology enables integration on various vehicle types, including 4x4, 6x6, 8x8, and light tracked vehicles, without the need for ground support.

What sets Patria TREMOS apart is its exceptional shoot-and-scoot capability. The system can emplace and open fire within 60 seconds from patrol mode and within 30 seconds from known firing position and displace immediately after the last round, maximizing crew survivability and minimizing exposure. This fast in-and-out-of-action capability is a critical advantage in high-threat environments.

The modular design of Patria TREMOS optimizes space usage and simplifies integration across different platforms. The system can be quickly transferred between vehicles, and its crew stations can be equipped with seats, allowing operators to remain in position during movement—further reducing setup time. The efficient recoil system eliminates the need for ground support, enabling the fastest possible displacement.

A modular ammunition handling system ensures safe and efficient operation, while the system's simplicity allows it to be operated by just three crew members. By leveraging existing components and training, Patria TREMOS offers a cost-effective, scalable, and rapidly deployable fire support solution for modern infantry operations.



Technical description

Armament

- Mortar 120/81 mm smoothbore
- Muzzle loaded - manual
- Recoiling system: hydro-pneumatic
- Manual laying system
- Traverse $\pm 185^\circ$
- Active elevation range $+40^\circ$ to $+80^\circ$. Maintenance -3°
- Compatible with existing mortar tube and breech

Integration module and weapon (example)

- Weight 1600 - 3500 kg (configuration dependent)
- Crew: 3-4 (commander, gunner & 1-2 loaders)
- Seats for crew members
- Modular ammunition storage with integrated preparing table
- Integration module as per selected vehicle

Performance

- Time to open fire:
 - < 30 sec from known position
 - < 60 sec from patrol mode
- Time to scoot immediately
- Max. rate of fire 12 rds/min
- First three rounds 15 sec
- Range 7+ km (ammunition depend)

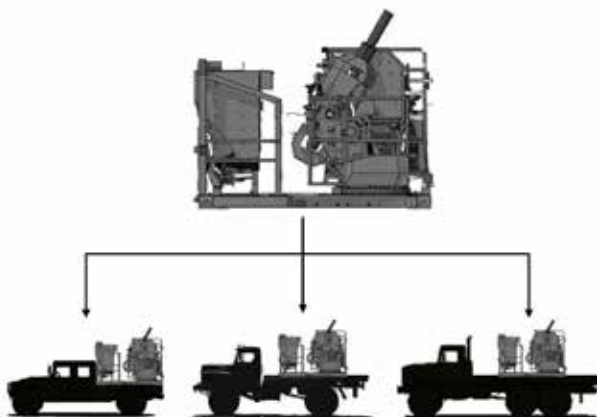
Equipment from Patria or GFE

- Weapon
- INU
- Weapon terminal

Advantages of Patria TREMOS

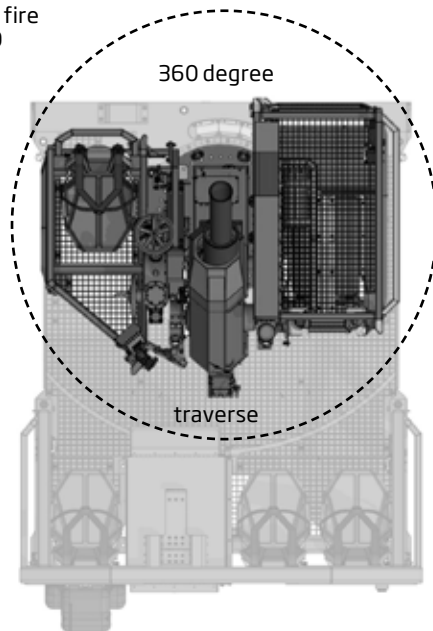
- **High Mobility:** Designed for rapid deployment and movement, ideal for modern and future warfare scenarios.
- **Modular Integration:** Easily installed and transferred between a wide range of vehicle platforms, enhancing operational flexibility.
- **Compatibility with Existing Systems:** Supports current mortar tubes, ammunition, and ballistic tables, simplifying adoption.
- **Cost-Effective Modernization:** Offers an affordable upgrade path for smoothbore mortars with improved performance.
- **Precision Firepower:** Equipped with an Inertial Navigation Unit (INU) and Weapon terminal for first-round accuracy.
- **Recoil Mitigation Technology:** Enables use on various vehicle types without requiring ground support.
- **Shoot-and-Scoot Capability:** Can fire within 60 seconds from patrol mode and within 30 seconds of arrival to known firing position and displace immediately after firing, enhancing survivability.
- **Platform Versatility:** Compatible with 4x4, 6x6, 8x8, and light tracked vehicles.
- **Efficient Crew Operation:** Operable by just three crew members, reducing manpower requirements.
- **Safe and Efficient Ammunition Handling:** Modular handling system ensures operational safety and speed.

Easy integration on various vehicle types



Vehicle swap within minutes

Can open fire within 30 seconds



Leave firing position within seconds



Patria

When it is not an option.

www.patriagroup.com