

Mamba™ Mk7

The Next Generation of the Legendary Armored Vehicle



The logo for AM General, featuring the text "AM General" in a bold, blue, sans-serif font. The "AM" is slightly larger and more prominent. A red swoosh underline is positioned beneath the text, starting under the "A" and ending under the "l". A registered trademark symbol (®) is located at the end of the text.

AM General has entered into an exclusive relationship with Osprea Logistics USA LLC in Alexandria, Virginia to market and offer for sale the Osprea Mamba and its variants to the United States Government through the Foreign Military Sales (FMS) System. Under this agreement the Mamba and its variants will be manufactured by Osprea Logistics USA LLC and sold and supported by AM General in South Bend, Indiana.

History

High Technology; Low Complexity

The Mamba™ Mk7 is the latest generation of Osprea's highly successful Mamba™ APC platform. Born of the iconic South African Mamba which is largely credited as being the father of the modern APC/MRAP, the Mamba has risen to new levels of capability and performance, with enhanced protection and substantial powertrain improvements over its three generations: Mk5 Magirus, Mk5 Iveco, and the Mk7.

Hundreds have been fielded across the most austere Peacekeeping Operation (PKO) and kinetic Counter Terrorist (CT) environments, surviving multiple IED strikes of 50 and 80 kg.

It has fast become the PKO, CT and Counter-Insurgency (COIN) operation vehicle of choice for the US Government and other organizations and governments because of its simplicity, functionality and price point.

A NATO level APC at a fraction of the price.



Osprea Mamba Mk5 Magirus



Osprea Mamba Mk5 Iveco (Mk6)



Osprea Mamba Mk5 Magirus



Osprea Mamba Mk5 Iveco (Mk6)



Mamba™ Mk7

The New Generation

Protection

Crew survivability is of primary importance. Every design aspect of the Mamba™, from its armor to its driving dynamics, is predicated on protecting its personnel

The Mamba™ Mk7 has advanced protection systems against land mines, IED's and ballistic threats.

Third-party tested to:

AEP55 STANAG level 4a and 4b for blast protection

B7 Ballistic protection all round

AEP55 STANAG Level 3- for 7.62x54AP

Proven stopping capacity up to .50 Caliber 3-shot triangle

Additional up-armoring to specification as required

Passive RPG Protection optional

There simply is no safer vehicle in its class or price bracket. All in a vehicle weighing less than 11.5 ton curb weight.





Armament

Not just a protective troop transporter, but a troop-carrying fighting vehicle

The Mamba is a multi-purpose mine-protected vehicle. In its core role as a fighting platform, it is customizable to client mission requirements.

The vehicle can be equipped with a primary weapon system protected by a STANAG ballistic turret, manual or electrically driven, supporting a weapon of up to 12.7 mm or 0.50 Cal., with retractable gunner's stand.

Additional swing arm mounts with shields can be fitted to firing points on the vehicle. The secondary systems can support weapons of up to 7.62 Caliber.

The Mamba is designed to allow troops to engage from inside the armored capsule. Any of the windows can be fitted with gun ports.

Additional systems can be added at client request:

Smoke grenade launchers

40 mm AGL

Automated weapon station with remote firing

Shooter location systems

Passive RPG protection netting

Mobility

The Mamba™ Mk7 provides high tactical mobility in any terrain or environment

The Mamba™ Mk7 offers unrivaled mobility:

13.5 m turning circle offers unparalleled urban theatre performance

Hill climb capability of 70%

Step climb of 600 mm

Side tip of 35%

Clearance of 350 mm

Range > 800 km

Fording depth of 1,000 mm

Leaf spring live axle suspension for rugged mobility and ease of maintenance

This mobility extends to its operational readiness: it is powered by a fully mechanical, non-electronic power-pack, significantly extending life, reducing service and maintenance costs and cycles and dramatically easing ad hoc operational repairs.

In a recent accident, a Mamba™ Mk7 was driven off a 2,5m vertical drop into rough terrain, sustaining only a single broken suspension pin.



600 mm vertical step up

Powertrain

Simplicity, functionality, robustness and ease of maintenance are at the heart of Osprea's design of the Mamba™

The Mamba™ Mk7's powertrain is based on an air-cooled, mechanically injected 6-cylinder inline, turbocharged engine. Without an electronic management system, this base engine is one of the most robust and reliable power-plants available and is easily serviceable with simple tools, with no requirement for computer diagnostic support.

This is coupled to a six-speed automatic transmission driving through a selectable two-speed transfer case with locking differentials.

High power-to-weight ratios for reliable operation in extreme environments.

Options:

Independent suspension system

Half:Half. Independent front suspension, rigid rear

Mechanical Continuously Variable Transmission (CVT) is available as an option for added simplicity and ease of operation in high pressure and combat situations

Mechanically injected water-cooled V6 turbo charged engine for substantially increased power

Situational Awareness

If you can't see, you can't act

The Mamba™ has unique situational awareness making it a true fighting vehicle, not just a secure transport. Kinetic operations require soldiers to be able to engage from within the vehicle. COIN, PKO & CT operations require operators to be acutely aware of their surroundings, especially in mixed civilian and combat environments.

A sloping bonnet allows objects and people to be seen by the driver just 8 meters from the vehicle as opposed to nearly 20 meters in some of its rivals.

Five windows in the rear capsule, each optionally with its own gun-port, give occupants all-round situational awareness and fightback capacity from within the vehicle.

Four roof hatches, two front and two rear, as well as the turret hatch, increase not only situational awareness but emergency escape capability.



Excellent driver visibility



Window gun-ports



Roof and turret hatches

Variants

One platform; six vehicles

In low-complexity militaries, simplicity and usability are the keys to success. Less training, simpler maintenance and greater usage.

The Mamba Mk7 is designed as a single-format, multiple-platform vehicle. With a modular interior, it can be configured as:

Troop carrier

Command and Control

Ambulance

Emergency recovery vehicle

EOD

IED interrogator arm vehicle

Additional options add ground penetrating radar to the EOD or IA vehicle.

Modular systems enable interchangeability and conversion of vehicle interiors.

Multi-platform with a simplified, unified logistics and parts supply chain.



Add-ons

Low entry price, opens the budget for adding sophisticated additional systems

Bespoke flexibility with an infinite variety of potential options:

Independent suspension system for a more refined ride

Semi-independent suspension (independent front, rigid rear) for balanced mobility

Water-cooled engine, electronic or mechanical, power up to 328 kW, power-to-weight ratios from 15 to 25 kW/ton

Electronic Counter Measures

Ground Penetrating Radar

Automated Weapon System

Shooter locator

Localized radar

Selection of cameras, GPS systems and customer-defined equipment

Industrial Partnership

Osprea is dedicated to long-term working relationships with its clients, providing the best working solutions

Osprea has developed a fully industrialized assembly process for the Mamba™ Mk7, enabling the vehicle to be manufactured and assembled in the client's country, subject to ITAR compliance.

The process is fully scalable to meet client needs and capability, from component procurement through final assembly. This capacity-building process enables a country to meet its military needs, economic imperatives and industrialization-level development.

Complete and Semi-Knock Down Kits available

Vehicle Expertise and Skills Development – Local workforce employed in assembly/manufacturing process and mentored in required skill-sets

Reinvestment – Defense spending fed back into the local economy

Capacity building – Long-term commitment to developing and improving the country's program through pride of ownership and enhancement





Technical Specifications

Data	Mk7	Mk7-X
Length	6,273 mm (247 in)	6,680 mm (262 in)
Width	2,542 mm (101 in)	2,634 mm (103 in)
Height	2,822 mm (111 in)	2,882 mm (113 in)
Weight GVWR	14,900 kg (33,000 lb)	16,800 kg (37,037 lb)
Power / Weight	13.5 kW/t (18.1 hp/t)	24.8k W/t (31.97 hp/t)
Crew	2+8	2+8
Ballistic Protection	B7 all round AEP55 STANAG 3- for 7.62x54AP Stops 0.50 Cal	B7 all round AEP55 STANAG 3- for 7.62x54AP Stops 0.50 Cal
Blast Protection	STANAG 4a and 4b	STANAG 4a and 4b
Performance		
Fording	1.0 m (39.3 in)	1.2 m (47.2 in)
Approach Angle	31°	31°
Departure Angle	34°	34°
Side Slope	30°	30°
Vertical Obstacle	600 mm (23.6 in)	600 mm (23.6 in)
Air Transportable	C130, A400, C17 and C5	C130, A400, C17 and C5
Turning Circle	13.5 m (44 ft)	14.2 m (46 ft)
Turning Radius	6.75 m (22 ft)	7.1 m (23 ft)
Gradeability	70%	70%
Max Road Speed	105 km/h (65.6 mph)	105 km/h (65.6 mph)
Operational Range	805 km (500 mi)	600 km (375 mi)

Specifications may be subject to change. Variations can be agreed with the client.

Technical	Mk7	Mk7-X
Engine	Deutz 150 kW (201 hp). Air-cooled	Deutz 300 kW (403 hp). Water-cooled
Transmission	Automatic. 6 forward, reverse	Automatic. 6 forward, and 1 reverse
Transfer Case	2 speed with lockable, drive	4-wheel 2 speed with lockable, 4-wheel drive
Driven Axles	Front and rear with Diff Lock	Front and rear with Diff Lock
Suspension	Rigid axles with parabolic leaf springs	Optional Independent Suspension Axle System
Brake	Drum brakes. circuit, air operated	Dual Disc Brakes. Air Operated with ABS
Tires	365/85R20 MSA	396/85R20
GVWR Weight	14,986 kg (33,000 lb)	16,800 kg (37,037 lb)
Empty Weight	11,103 kg (24,478 lb)	13,500 kg (29,762 lb)
Payload	3,865 kg (8,521 lb)	3,300 kg (7,275 lb)
Ground Clearance	350 mm (13.78 in)	457 mm (18 in)

Virtual Reality and Digital

Experience the interior of the Mamba Mk7 in 3D with Google cardboard (or similar 3D viewing goggles). Sit inside the Mamba in full 3D Virtual Reality and access heads-up display of technical data on the various aspects of the vehicle.

Download the Mamba Mk7 App and video from:

iOS
Apple App Store

Android
Google Play Store

YouTube
Building the Mamba Mk7



AM General designs, engineers, manufactures, supplies and supports specialized vehicles for military and commercial customers worldwide. Through its military business, the company is widely recognized as the world leader in design, engineer, manufacture and support of Light Tactical Vehicles, having produced and sustained more than 300,000 vehicles in over 60 countries. Its growing commercial business includes its wholly owned subsidiary, Mobility Ventures, designer and manufacturer of the acclaimed MV-1, the only American made vehicle specifically engineered from the ground up in support of wheelchair users and people with disabilities.

AM General is also proud to have been selected by Mercedes-Benz to be its only contract manufacturer in the United States, producing the R-Class vehicle in Mishawaka, Ind. Additionally, the company was selected by the U.S. Postal Service to develop and test advanced automotive technologies for use in the Next Generation Delivery Vehicle program. AM General has more than five decades of experience meeting the changing needs of the defense and automotive industries, supported by its employees at major facilities in Indiana, Michigan, and Ohio, and a strong supplier base that stretches across 43 states.

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