MPV 4x4

Mine protected vehicle (MPV) with enhanced ground explosive and ballistic protection for superior tactical mobility







Ambushes, land mines, and improvised explosive devices (IED) present a significant threat to both troops and vehicles. Moreover, recent advances in anti-tank mines – such as amplified explosive power; shaped charges which increase damage; innovative dispersal systems; and sophisticated detonation triggers – have further increased the risks. Superior armor protection, combined with high mobility, is essential for any vehicle entering a battle zone. Elbit Systems' MPV 4x4 is a blast-protected, wheeled platform designed to operate effectively in explosive hazardous environments.

With enhanced protection technologies, the MPV 4x4 provides the highest levels of safety to both the vehicle and the crew. Built on four decades of experience and expertise in military defense technology, Elbit Systems' MPV delivers the critical balance between proven survivability and tactical mobility. Suitable for use on a variety of terrains and topographies, the platform can be tailored to meet a broad range of mission requirements, including command and control, combat casualty care, logistics, communications and more.



Advanced armor protection

With a gross vehicle weight (GVW) of 13 tons and a 1.5 ton payload capacity, the MPV 4x4 offers a superior level of resistance to the effects of a mine detonation. Verified by independent testing, the platform can withstand a number of explosives including: 21kg TNT, which is more than a triple anti-tank mine under any wheel; 14kg TNT, which is more than a double anti-tank mine under the hull; an IED side blast of 14kg TNT; and 500g of shrapnel at a distance of three meters. In addition, the MPV 4x4 features rear door and four hatch access, as well as a bush-proof exterior design that is fully repairable following a detonation.

Reliable and robust platform components

The MPV 4x4 is constructed from field-proven components, including a MAN 6 cylinder diesel with an intercooler engine; option of manual or automatic transmission; transfer case lock-up with differential locks for front and rear axles at both high and low range; parabolic suspension springs with heavy-duty hydraulic shock absorbers; power steering; dual circuit pneumatic type brakes; and Michelin tires with options for run-flat and tire inflating systems. The MPV 4x4 offers a choice of interior designs, including ballistic-resistant chairs for up to 12 crew members, air conditioning, gun stands and communications racks. High level of maneuverability for ease of operation - With a road speed of up to 110km/h with full combat weight and a cross-country speed of up to 90km/h - depending on terrain – the MPV 4x4 can power its way through the toughest landscapes, increasing the probability of mission success. The 4x4 platform provides better maneuverability in urban areas, narrow roads and off-road terrains than that offered by 6x6 platforms.

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Key Features

- Advanced ballistic protection
- 13 tons GVW
- 1.5 tons payload
- Field-proven automotive components
- Rear door and four hatch access
- · Bush-proof exterior design
- Crew capacity of 2 + 10
- Customized interior modeling

Operational Benefits

- · Increased survivability and tactical mobility
- · Highly maneuverable on multiple terrains
- Superior operational performance
- Fully repairable following detonation
- Suitable for a wide range of mission requirements

Technical Specifications

Characteristics

- Engine: MAN 6-cylinder diesel with intercooler
 - · 224hp @ 2400rpm
 - 825Nm torque @ 1400 1700rpm
 - · Euro 3 or Euro 4
- Transmission: manual or automatic (ZF, Eaton 6 or Allison)
- Transfer case lock-up with high/low range front and rear differential locks
- Suspension: parabolic springs with heavy-duty hydraulic shock absorbers
- Power steering (standard)
- Electrical system: 24V
- Brakes: dual circuit pneumatic type
- Tires: 365/80R20 Michelin with run-flat option and tire inflating system

Performance

- Road speed: Up to 110km/h at full combat weight
- Cross-country speed: Up to 90km/h depending on terrain
- Power to weight ratio: 17hp/ton
- · Range: 800km with on-board fuel at KPL of 4.0
- Maximum gradient: 70% or 35°
- Side slope: 34% or 17°
- · Turning circle: 15m
- · Fording depth: 1.2m unprepared
- · Ground clearance: 340mm under rear axle

Ballistic Protection

- Full STANAG 4569 L2 including multi-hit
 - 7.62mm x 51 NATO ball
 - 5.56mm x 45 NATO SS 109
 - 5.56mm x 45 NATO M 193
 - 7.62mm x 39 API BZ
- Add-on armor concept for optional upgrades

