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FNSS



PARS ALPHA 8x8

NEW GENERATION ARMOURD FIGHTING VEHICLE



OVERVIEW

PARS ALPHA 8x8 New Generation Armoured Fighting Vehicle

FNSS PARS ALPHA 8x8, is a New Generation Armoured Fighting Vehicle designed to surpass the most challenging tactical and operational requirements. Built for full-spectrum dominance, it represents the future of military engagement, by meeting the most challenging mission objectives to fulfill tactical and superior combat performance.

Adaptive All-Terrain Mobility

Embrace the future with PARS ALPHA's leading-edge all-terrain capabilities. Through any weather condition, its innovative 8x8 all-wheel-drive, ride-height control and all-axle steering system offers advanced mobility. The hydro-pneumatic suspension with adjustable ride height enables persistent cross-country agility, enhanced by a turning radius optimized for confined urban warfare. Overcoming 40% side slopes, 70% gradients, 2.4-meter trenches and 0.80-meter vertical challenges is a routine for its drivetrain.

PARS ALPHA will be the vehicle of choice for future rapid deployment forces worldwide with an ability to achieve over 115 km per hour road speed. Thanks to its powerpack and advanced suspension system, which allows lowering the vehicle's height for best road stability at high speeds. Its design ensures sustained vehicle mobility even with tire and/or wheel loss, keeping missions on track. An impressive operational range of over 800 km sets this vehicle apart, allowing for extensive deployment without need of refuelling.



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PARS ALPHA 8x8

NEW GENERATION ARMOURED FIGHTING VEHICLE



The vehicle also offers superior performance and reliability with its extended operational endurance, covering an impressive 5000 km of cross-country and on road drive, without any need for field maintenance. PARS ALPHA 8x8's reduced logistics burden, increased mean time between failures (MTBF) and enhanced mission readiness, elevates combat manoeuvres with a vehicle that goes beyond expectations.

High Level of Survivability

This next-gen vehicle brings revolutionized protection systems offering unrivalled resistance to mines, IEDs, KE threats and artillery projectiles. Mine blast attenuation seats, and positioning the driver and commander above the second axle behind the power pack compartment reinforces crew safety against very high-level of threats from all around the vehicle. This design approach

provides unique KE ballistic protection especially at the vehicle frontal arc. Its hydro-pneumatic suspension system with adjustable ride height control can increase mine protection by surpassing a ground clearance of 60cm on demand. A gunshot detection system, laser warning, soft-kill and hard-kill active protection systems can also be integrated based on user requirements.

PARS ALPHA, incorporates positive pressure and face mask CBRN defence measures by providing a sealed environment within the vehicle. This feature prevents toxic contaminants,

enabling crew members to survive and maintain combat efficiency even when the outside environment is hazardous and lethal.

Its adaptable structural design and vehicle silhouette enables best in class lower-profile while maintaining an extensive internal volume with open architecture. These features ensure the crew and dismounts remain fortified against external threats, underlining its role as a new generation asset for modern warfare.



Watch the Video



OVERVIEW

Advanced Weapon Integration

The new generation PARS ALPHA 8x8 comprises the integration of advanced weaponry. TEBER-II 30/40 remote-controlled turret (RCT) is fitted with 30mm dual feed automatic cannon. The 30mm cannon can be replaced with a 40mm barrel, by only changing the recoil spring and forward feeder. This convertible weapon of choice enables the user to upgrade its firepower with minimum effort, when and wherever required. A 7.62mm chain gun or MAG machine gun can be coaxially mounted aligned with the main gun.

TEBER-II 30/40 RCT is also adapt to use various modern anti-armour systems such as Semi-automatic command to line of sight (SACLOS) and Automatic command to line of sight (ACLOS) guided missile types. Two each ready to fire ATGM's are supported with an on board fire control system. This capability enables diversified threat engagements with an effective range beyond 4km's.

A high elevation and low depression 7.62 or 5.56mm independent overhead remote controlled weapon system (ORCWS) is situated on top of the turret. Its high elevation is used against threats on high grounds on urban environment (building, roofs, etc.) as well as encountering

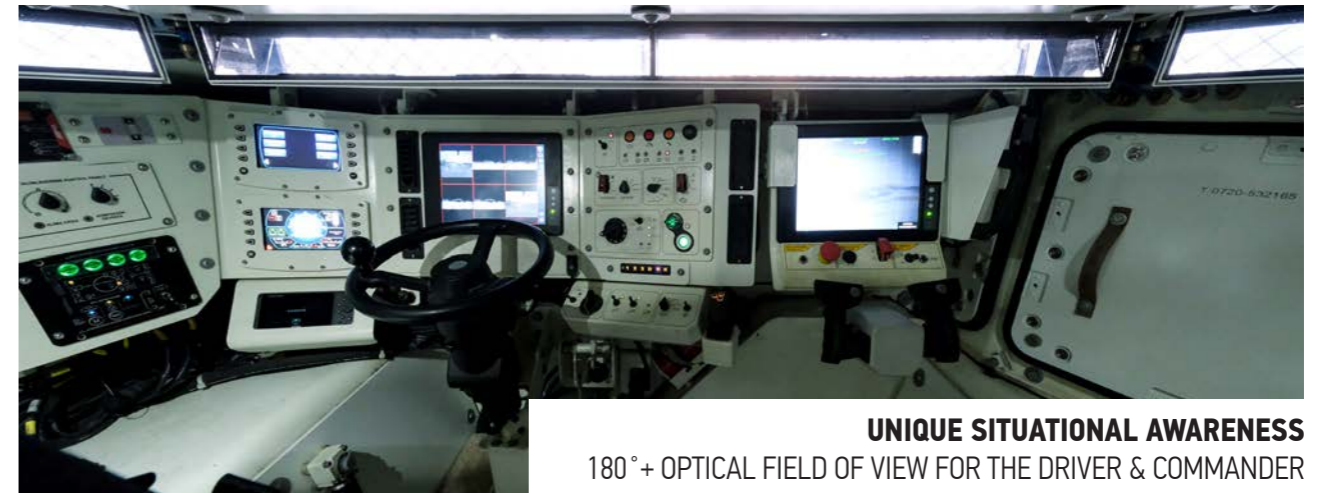
drones approaching from top angles. ORCWS is also used as the commander's independent sight for hunter killer capabilities.

Both the turret and RCWS is designed to engage multiple targets simultaneously from all directions. TEBER-II 30/40 RCT offers target tracking and two-axis stabilisation that allows firing on the move.

Besides TEBER-II 30/40 RCT, the vehicle can be fitted with various types of manned or remote control turrets up to 120mm direct/indirect guns or weapon systems, 120mm mortars, air defence systems and anti-armour systems.

PARS ALPHA 8x8

NEW GENERATION ARMOURD FIGHTING VEHICLE



UNIQUE SITUATIONAL AWARENESS
180°+ OPTICAL FIELD OF VIEW FOR THE DRIVER & COMMANDER

Unique Situational Awareness @ Superior Crew Coordination

Since the late Cold War era, front-side-engine 6x6 and 8x8 wheeled armoured combat vehicles have followed a common design approach. In this traditional design, the driver is isolated at the very front of the vehicle, adjacent to the engine compartment, while the commander is situated behind the driver. Both occupants typically experience a narrow field of view while driving with hatch down position.

PARS ALPHA 8x8 New Generation Armoured Fighting Vehicle features a revolutionized structural design by situating the crew and dismounts behind the power pack compartment. With its

compact powerpack design, commander and driver are able to sit side-by-side. This new layout approach enables 180°+ real time optical situational awareness for both occupants.

It also enhances crew safety during long distance drives without opening top hatches at hostile territories. Subsequently it also ensures eye contact and improved coordination between the vehicle crew and the dismounts.

In addition to its unique optical field of view, the vehicle is equipped with displays and integrated 360-degree situational awareness cameras that provide both day and night vision for crew and dismounts.

Air Transportable with Strategic Operational Capability

The PARS ALPHA 8x8 is compliant to modern military logistics as being transportable on highways, railways and compatible with a fleet of strategic airlifters such as the A400M, C-17 Globemaster, C-5 Galaxy, An-124 and Il-76. With this level of airlift compatibility, the PARS ALPHA is always at the vanguard, ready to establish dominance wherever the mission dictates.



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SURVIVABILITY LAYERS

PARS ALPHA 8x8

NEW GENERATION ARMoured FIGHTING VEHICLE



INCOMPARABLE PROTECTION AGAINST DIRECT & INDIRECT THREATS

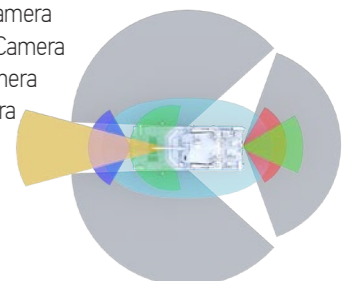


ACTIVE PROTECTION SYSTEM
Integration of Hard-Kill & Soft-Kill Active Protection Systems Based on User Requirement

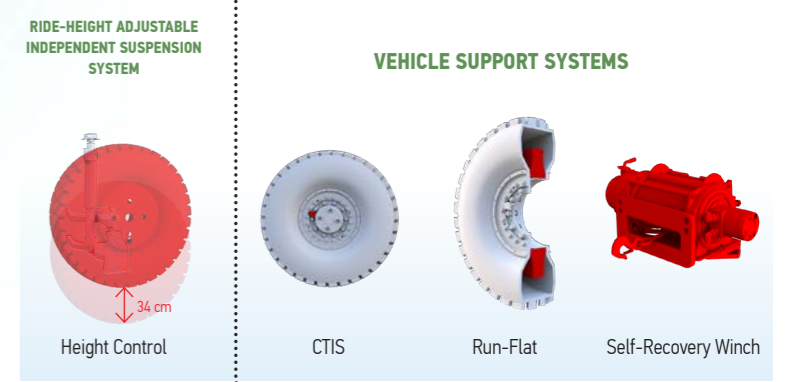
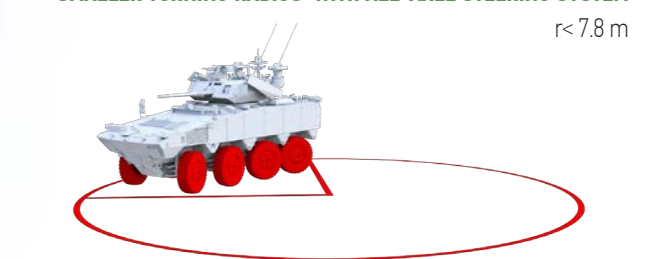


UNRIVALLED SITUATIONAL AWARENESS

- 360° Surround Top View Camera
- 127° Wide Angle Thermal Camera
- 121° Front Manoeuvre Camera
- 44° Driving Thermal Camera
- 118° Rear Day Camera
- 180°+ Front Periscope
- 47° Rear Periscope



SMALLER TURNING RADIUS WITH ALL-AXLE STEERING SYSTEM



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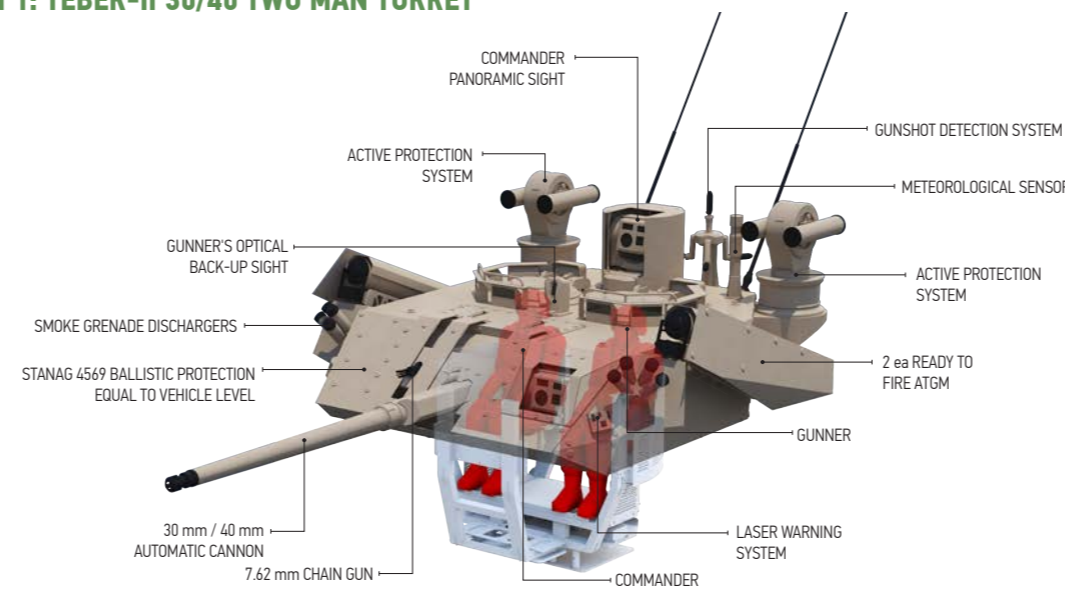


PARS ALPHA 8x8

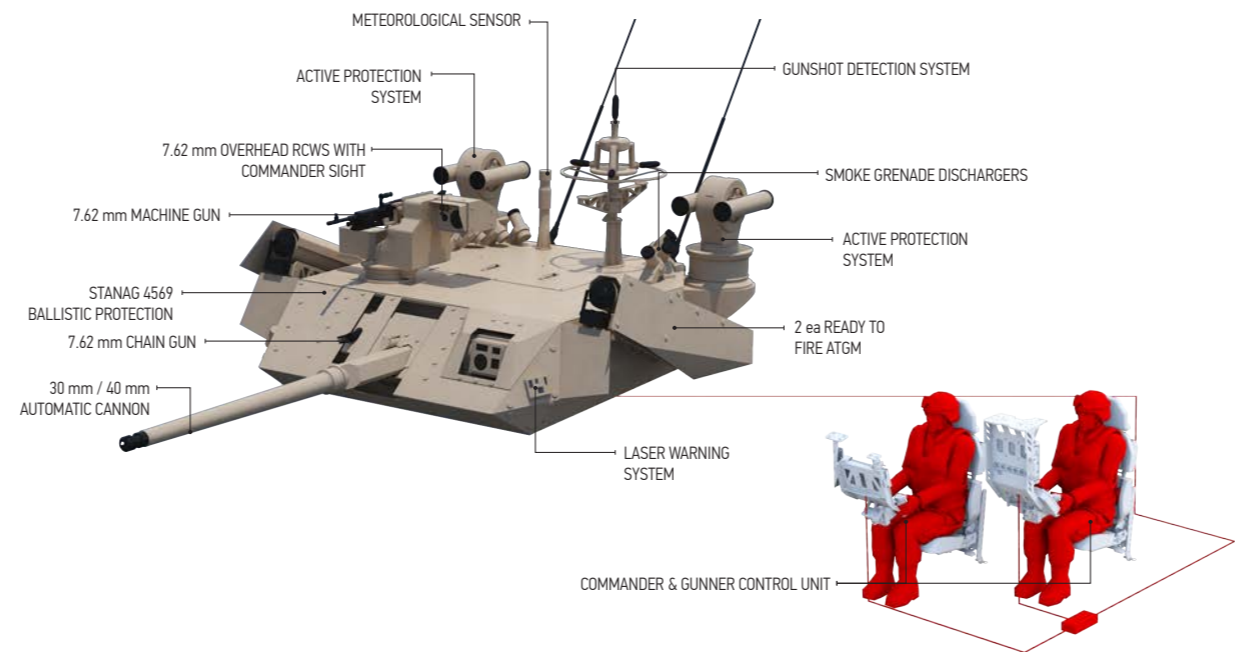
NEW GENERATION ARMoured FIGHTING VEHICLE



OPTION 1: TEBER-II 30/40 TWO MAN TURRET



OPTION 2: TEBER-II 30/40 REMOTE CONTROLLED TURRET (RCT)



30mm x 173mm AMMUNITION TYPE



40mm SUPER40 AMMUNITION TYPE

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PARS ALPHA 8x8

NEW GENERATION ARMoured FIGHTING VEHICLE



PARS ALPHA 8x8
120 mm / 105 mm / 90 mm Mobile Gun System

PARS ALPHA 8x8
30 mm or 40 mm New Gen AFV with Two Man Turret

PARS ALPHA 8x8
30 mm or 40 mm New Gen AFV with Remote Controlled Turret



PARS ALPHA 8x8
35 mm New Gen AFV with Remote Controlled Turret

PARS ALPHA 8x8
2 x 120 mm Armoured Mortar Vehicle

PARS ALPHA 8x8
2 x 35 mm Air Defence Gun System



PARS ALPHA 8x8
Air Defence Missile System

PARS ALPHA 8x8
Combat Engineering Squad Vehicle

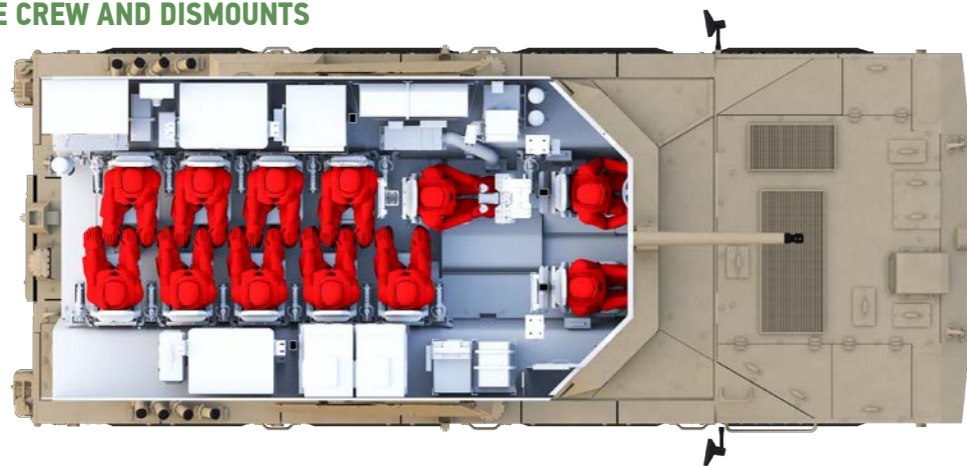
PARS ALPHA 8x8
Command Control & Fire Support Vehicle

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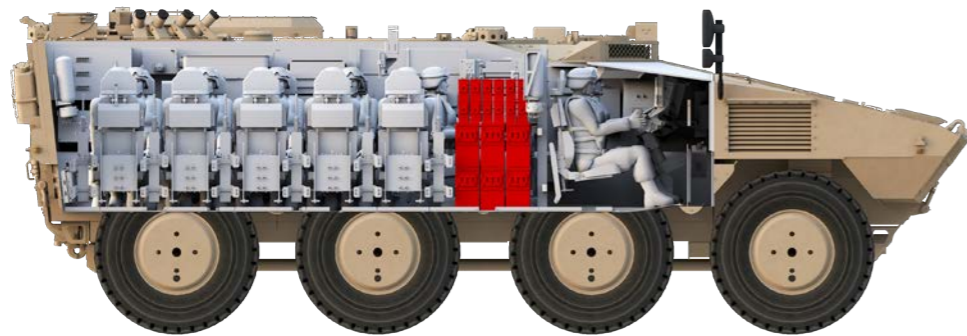
PARS ALPHA 8x8 INTERNAL LAYOUT



ENSURES EYE CONTACT AND IMPROVED COORDINATION BETWEEN THE VEHICLE CREW AND DISMOUNTS



ADDITIONAL AVAILABLE INTERNAL VOLUME FOR LOGISTICS & MISSION EQUIPMENT



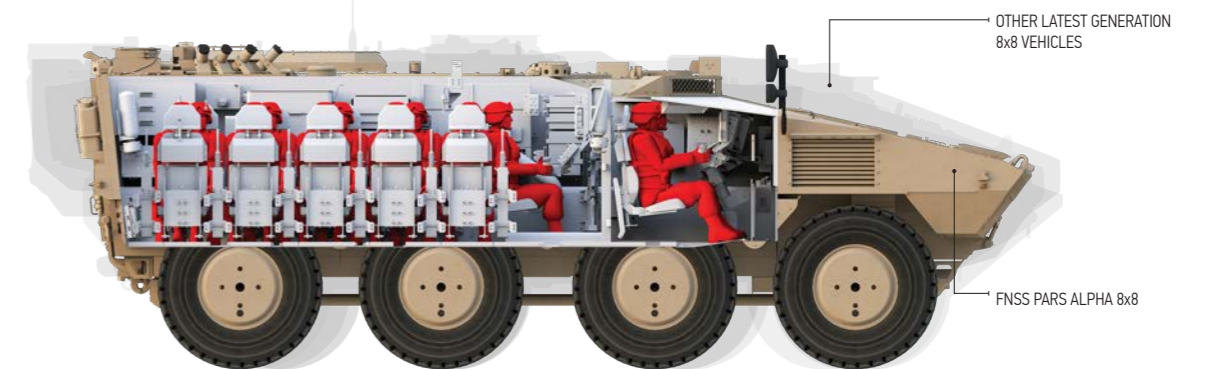
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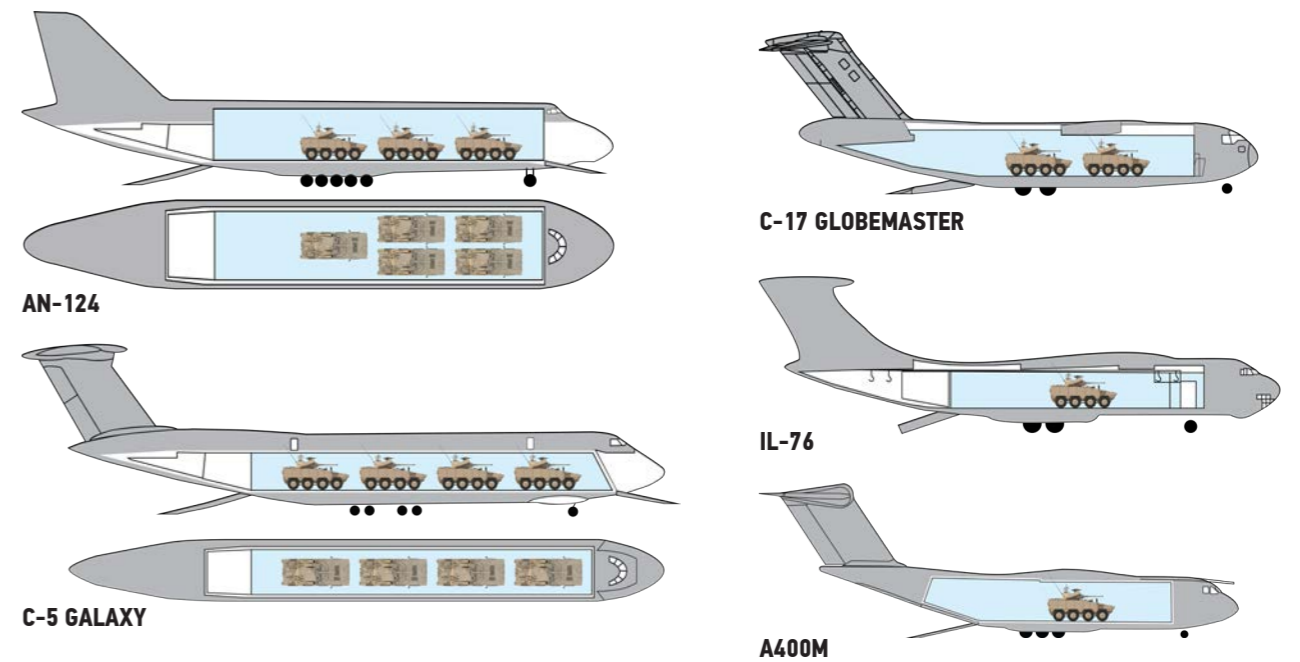
TRANSPORTABILITY



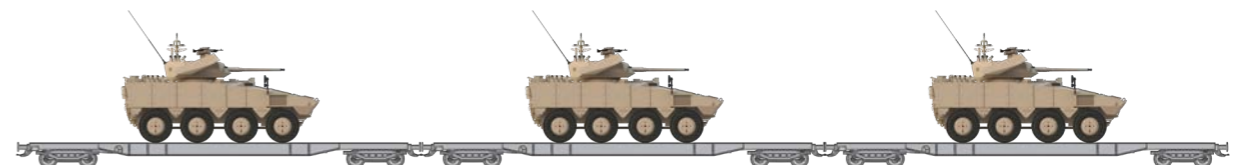
LOWER SILHOUETTE WITH HIGHER INTERNAL VOLUME



AIR TRANSPORTABLE & STRATEGIC OPERATIONAL CAPABILITY



TRANSPORTABLE BY RAILWAY



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PARS ALPHA 8x8 New Generation Armoured Fighting Vehicle Technical Specifications

Data subject to change without notice.

GENERAL	
Power-to-weight Ratio	> 21 Hp/ton
Crew	12 (3+9 Inc. Gunner, Driver & Commander, IFV Configuration with Remote Controlled Turret)
Length	< 7.8 m
Width	< 3.1 m
Height	< 2.4 m (On Road) < 2.2 m (On Transportation)
MOBILITY	
Engine	711 HP, Diesel
Transmission	Fully Automatic, 6 speed forward, 1 speed reverse
Max. Road Speed	> 115 km/h
Creep Speed	< 5 km/h
Range	> 800 km
Gradient	70%
Side Slope	40%
Angle of Approach	> 55°
Angle of Departure	> 55°
Vertical Obstacle	0.8 m
Trench Crossing	2.4 m
Turning Radius	< 7.8 m
Fording Depth	1.2 m
Suspension System	Independent, Double Wishbone, Hydro-Pneumatic Suspension with Ride Height Control
Number of Axles	4
Driven Axles	All Wheel Drive
Steered Axles	All Wheel Steered
Transfer Case	2 Speed
Service Brakes	Pneumatic and ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Controlled
PROTECTION & LIFE SUPPORT SYSTEMS	
High Level of Ballistic Protection	STANAG 4569 (Level Classified)
High Level of Mine Protection	STANAG 4569 (Level Classified)
High Level of IED Protection	STANAG 4569 (Level Classified)
Active Protection System	Optional
Laser Warning System	Optional
Gunshot Detection System	Standard
Smoke Grenade Dischargers	16
Automatic Fire Suppression System	Standard
CBRN Protection System	Over Pressure & Face mask
A/C and Heater	Standard

ARMAMENT	
Turret Type	TEBER-II 30/40 Two Man or Remote Controlled Turret
Main Armament	30mm/40mm Chain Gun, Dual Feed Automatic Cannon (can be replaced with a 30 or 40mm barrel, without making any changes to the gun mount and other parts)
Secondary Armament (Coaxial)	7.62 mm MG or 7.62 mm Chain Gun
Number of Ready to Fire Rounds	30 mm x 173 - 200 40 mm x 180 - 200 7.62 mm - 600
Traverse	360° Continuous
Elevation	-10° to +45°
Max Acceleration	> 1.5 rad/s ² (Tra/El)
Stabilisation	Electric Drive with Two-Axis
Anti-Tank Guided Missile	2 ea ready to fire ATGM (type of ATGM selected by the user)
Overhead Remote Controlled Weapon Station (ORCWS) with Commander Sight	7.62 mm or 5.56 mm MG Integrated into the Commander's panoramic sight system
Number of Ready to Fire Rounds	5.56mm - 800 7.62mm - 500
Traverse	360° Continuous
Elevation	-50° to +85°

MISSION EQUIPMENT	
360° Situational Awareness System	Standard
Driver Vision System	Standard
Battlefield Management System	Optional
Navigation System (INS/GPS)	Standard
Communication Equipment	VHF/UHF Radios Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 464 Isolated High Power for Mission Equipment
Auxiliary Power Unit (APU)	Optional