

FNSS, a Turkish Armoured Combat Vehicle Manufacturer, Reveals PARS ALPHA 8x8 New Generation AFV, at the World Defence Show 2024

FNSS is proud to announce the global unveiling of the PARS ALPHA 8x8 New Generation Armoured Fighting Vehicle at World Defence Show, scheduled between 4th to 8th of February 2024. The vehicle is built for full-spectrum dominance at the battlefield. By meeting the most challenging mission objectives, it represents the future of military engagement to fulfil tactical and superior combat performance for present and emerging user requirements. The vehicle marks a leap forward in armoured warfare, symbolizing the dawn of a new era in tactical mobility, exceptional survivability and lethality.

"The PARS ALPHA 8x8 is the embodiment of FNSS's dedication to pioneering a future where the troops on the ground can secure a technological edge on the battlefield of both the present day and tomorrow," said Nail Kurt, CEO of FNSS. He continued, "The PARS ALPHA 8x8 represents a leap forward in armoured vehicle technology. Our commitment to innovation and understanding of the modern combat environment has culminated in a platform that delivers unmatched tactical flexibility and combat performance. It is designed to empower armies around the world with superior armoured combat capabilities"

Crafted with an acute focus on full-spectrum dominance, the PARS ALPHA 8x8 stands as a testament to FNSS's expertise in land systems and its foresight into the evolving landscape of military engagement. PARS ALPHA 8x8 incorporates state-of-the-art platform design and technologies to enhance exceptional mobility, survivability, durability, situational awareness and life support systems, in pioneering revolutionary solutions in new generation armoured warfare.

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.

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 vehicles 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.

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 Semiautomatic 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 remotecontrol turrets up to 120mm direct/indirect guns or weapon systems, 120mm mortars, air defence systems and anti-armour systems.

<u>Unique Situational Awareness & Superior Crew Coordination</u>

Since the late Cold War era, 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.

PARS Family of Vehicles

In its 35th year, FNSS proudly continues to fulfill the needs of its users with creative and forwardthinking solutions. FNSS excels in delivering solutions that are not only competitive but also reliable and adaptable, offering cutting-edge technology in tracked and wheeled armored combat vehicles, engineering vehicles, unmanned ground vehicles, modernization programs, turret systems, and hybrid power pack solutions.







The FNSS PARS Family of Wheeled Armoured Fighting Vehicles is engineered to meet the diverse tactical and operational requirements of military units and law enforcement forces. These vehicles offer unmatched versatility, designed to operate in most versatile missions and environments. Since the early 2000s, the PARS vehicle family has continuously evolved, receiving ongoing enhancements to address emerging threats and shifting security imperatives.

To date, FNSS has the privilege to sign all of the contracts for the 6x6 and 8x8 wheeled armored vehicles within Türkiye. Over time, the PARS 8x8 and 6x6 vehicles have become the preferred choice for the Turkish Army, Special Forces, and the Gendarmerie. Moreover, the PARS Family of Vehicles has garnered significant export success, securing contracts with the Malaysian Army for the 8x8 variant and with the Royal Army of Oman for the PARS III 8x8 and 6x6 configurations. In a very competitive market and its inherent challenges, FNSS continues to provide and maintain a wide range of vehicle configurations for its users worldwide.





PROTECTED MOBILITY AT YOUR SERVICE!

A GLOBALLY TRUSTED AND RESPECTED TURKISH DEFENCE COMPANY

FNSS is a globally recognized land systems company that specializes in designing and producing wheeled and tracked armoured combat vehicles as well as combat engineering vehicles, turrets and sustainability solutions. As the preferred solution provider of users in various countries, the Company has delivered thousands of armoured combat vehicles worldwide.

ADDING VALUE THROUGH INNOVATIVE SOLUTIONS

Thanks to its competent and dynamic workforce, FNSS offers innovative solutions throughout the entire product life cycle; from the design phase to the end of service life. Ever since the first roll-out in 1990, the Company has continuously improved its vehicle design and production capabilities in line with the requirements of its users. FNSS' KAPLAN class tracked armoured product family and PARS wheeled armoured vehicles are poised to shape new generation combat vehicle trends well into the 21st century.

MEETING USER EXPECTATIONS

FNSS designs and develops customized solutions to meet the requirements of each user. The key to FNSS' success in delivering tailored products within requested time frames lies in its flexible approach to project management. This is complemented by its ability to orchestrate an extensive supply chain and a wide range of global partnerships. FNSS has successfully engineered and supplied numerous products addressing unique requirements. These vehicles have been designed, manufactured and delivered to armies worldwide by FNSS' user-centric business models and tailored solutions.

BUILDING THE FUTURE WITH CONFIDENCE

FNSS products have been challenged by countless user endurance tests in the toughest conditions, and have proven themselves in combat missions. FNSS views user satisfaction as a permanent concept, and strives to ensure that its products serve beyond their life cycles by addressing any emerging needs throughout their use. FNSS also makes a difference by generating significant value for its international users through localization packages that include employing local labour, establishing domestic supply chains, and providing in-country training and technology transfer. Building upon it's over 30 years of heritage in the defence industry, FNSS continues to add value to its users by creating innovative solutions.

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