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Globally trusted and respected Turkish partner in defence.

We protect and add value to our users and stakeholders by creating innovative solutions.



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Spanish



French



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.









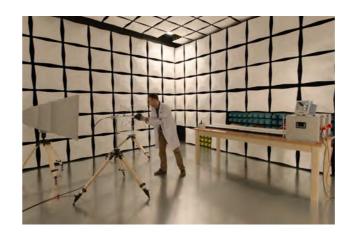
MEETING USER EXPECTATIONS

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.







TRACKED ARMOURED COMBAT VEHICLES





ARMAMENT

Main Armament

Auxiliary Power Unit (APU)

KAPLAN MT Technical Specifications

GENERAL	
Combat Weight	30,000 kg
Power-to-weight Ratio	>22Hp/ton
Crew	3 (Driver, Gunner and Commander)

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MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 4 Forward, 2 Reverse Gears
Powerpack Location	Rear
Max. Road Speed	70 km/h
Range	450 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.9 m
Trench Crossing	2.2 m
Turning Radius	Pivot
Track System	Double or Single Pin
Fording Depth	1.2 m
Suspension System	Torsion Bar

PROTECTION & LIFE SUPPORT SYSTEM	IS
Ballistic Protection	STANAG 4569 (Level Classified)
	Modular Add-on Armour Design
Mine Protection	STANAG 4569 (Level Classified)
Active Protection System	Optional
Laser Warning System	Optional
Gunshot Detection System	Optional
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard

Data subject to change without notice.

John Cockerill® 3105 105 mm

Ammunition	Main Armament Compatible with All NATO-Standard 105 mm Tank Ammunition
Autoloader	Fully Automatic, 12 Ready-Rounds Capacity
Secondary Armament (Coaxial)	7.62 mm or 12.7 mm MG
Additional Armament (Optional)	Roof-Mounted RWS or Pintle-Mounted MG
Elevation	-10° / +42°
Fire Control System	Digital Fire Control, Fully Stabilised Fire on-the-Move, Hunter-Killer and Day & Night Capability, with High First-Round hit Probability
MISSION EQUIPMENT	
Vision Systems	Commander and Gunner Independent Sight, Plus Direct-View Periscopes
	Gunner Emergency Direct-View Sight
Driver Vision System	Standard
Battle Management Systems	Standard
Navigation System	Standard
C	UHF/VHF Radios
Communication Equipment	Wireless Crew Intercommunication System

Standard





IKAPLAN MT



In the ever-changing landscape of the modern warfare, mediumweight tanks have emerged as an optimum balance of firepower, mobility, and protection. These versatile armoured vehicles will bridge the gap between main battle tanks and light armoured vehicles, offering a balanced solution for modern military operations.

Medium-weight tanks have been characterized by their adaptability to operate within a wider spectrum of combat scenarios. Their medium weight enables improved manoeuvrability and deployability compared to main battle tanks, while providing enhanced protection and firepower compared to light armoured elements. This versatility enables military forces to respond rapidly and effectively to wider range of operational requirements. As a force multiplier, medium tanks are becoming invaluable assets in both conventional and unconventional operations where manoeuvrability and rapid deployability are paramount.

FNSS' KAPLAN MT represents a unique response to emerging requirements in modern warfare. KAPLAN MT's indigenous design provides the lowest silhouette and highest power-to-weight ratio in its class. The platform is designed for optimum weight and mobility

performance. The latest technology power pack of the vehicle is combined with advanced electronic controlled systems, Auxiliary Power Unit (APU), and a heavy-duty suspension. These features enable the tank to ensure reliable and continuous power during expeditionary manoeuvres on the battlefield for day and night operations. Moreover, KAPLAN MT's advanced mobility system improves user ergonomics and extends life cycle of all mission equipment.

In accordance to the conventional tank concept, the KAPLAN MT's powerpack is positioned at the rear of the platform with increasing its mobility by enhancing high acceleration, especially on soft soil and rough terrain. This design allows the driver to operate the tank with the highest level of situational awareness without the need to open its top hatch. The concept also provides the tank gun with a significant depression angle. Other front engine tanks, converted from personnel carriers or Armoured Combat Vehicles (ACVs) cannot offer these capabilities to the user.

KAPLAN MT's design architecture provides a superior level of battlefield survivability, incorporating advanced ballistic and best-in-class mine protection systems. Active protection system can also be integrated as an option, based on user requirements.

KAPLAN MT's interior design is highly focused on user ergonomics and optimum crew comfort to increase overall performance of its users during operational tasks. KAPLAN MT is equipped with day and thermal cameras, multi-functional digital driver dashboard, and wide-angle optical periscopes for the driver. To provide hunter-killer capability, a third-generation high-performance sight system is also available for both the gunner and the commander. In addition, it has a Battlefield Management System (BMS) and Laser Warning Systems (LWS) to provide high level of tactical situational awareness for the crew.

The unique Anti-Armoured Punch for KAPLAN MT features the latest generation turret equipped with high-pressure 105 mm gun, offering substantial firepower against battlefield threats with great speed of response within a short period of time. It is an ideal weapon of choice for both direct and indirect fire missions, together with infantry support roles. Its unique indirect accurate firing capability allows effective engagement in both open fields and multi-complex urban terrains.

KAPLAN MT is in service with Indonesian Army and represents the only export contract of Türkiye within the Combat Tank Class.



KAPLAN NG-AFV Technical Specifications

GENERAL	
Power-to-weight Ratio	>20 Hp/ton
Crew	12 (Incl. Gunner, Driver & Commander)
MOBILITY	
Engine	Diesel
Transmission	Automatic
Max. Road Speed	70 km/h
Range	500 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.9 m
Trench Crossing	2 m
Track System	Automatic Track Adjuster Steel Track with Replaceable Pads / Composite Rubber Track
Suspension System	Torsion Bar

PROTECTION & LIFE SUPPORT SYSTEM	IS
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
IED Protection	STANAG 4569 (Level Classified)
Active Protection System	Optional
Laser Warning System	Optional
Gunshot Detection System	Optional
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard

Data subject to change without notice.

ARMAMENT	
Turret Type	TEBER Remote Controlled Turret
Main Armament	30, 35 or 40 mm Automatic
Secondary Armament (Coaxial)	7.62 mm MG
Traverse	360° Continuous

MISSION EQUIPMENT		
360° Situational Awareness System	Standard	
Driver Vision System	Standard	
Battlefield Management System	Standard	
Navigation System	Standard	
Electrical System	24 V	
Auxiliary Power Unit (APU)	Standard	

IKAPLAN NG-AFV

NEW GENERATION ARMOURED FIGHTING VEHICLE

TRACKED ARMOURED COMBAT VEHICLES



The KAPLAN NG-AFV is a new generation tracked platform designed by FNSS to meet the requirements of the future battlefield.

The KAPLAN NG-AFV is a modular vehicle, designed with possible integration options for manned and unmanned turret systems, armed with light and medium calibres as well as 120 mm gun systems.

The modular design allows the KAPLAN NG-AFV to be role-kitted in order to perform full spectrum missions such as mechanised infantry, reconnaissance, command & control, force protection, medical evacuation, recovery, combat engineering and direct or indirect fire support.

All those versions are based on the new generation armoured combat vehicle chassis, with a power-to-weight ratio of at least 20 hp/ton (depending on configuration), automatic transmission, and the ability to operate at the same pace of modern main battle tanks.

It has the ability to move at high speed on roads or cross-country terrain, and can operate in all kinds of climate. The advanced suspension system is designed to reduce vehicle vibration and increase road holding. It has an open-architecture vehicle electronics infrastructure that allows easy integration of different mission equipment according to requirements.

The KAPLAN NG-AFV is equipped with modular survivability systems to offer an effective solution to the changing threats of the battlefield. It is fitted with protection packages against ballistic, mine and improvised explosive threats.

The KAPLAN NG-AFV also offers an active protection system option against anti-tank missiles.



KAPLAN-10 Technical Specifications

GENERAL	
Power-to-weight Ratio	21 Hp/ton
Crew	5 (Commander, Driver, Gunner, Assistant Gunner and Additional Personnel)
Length	5.6 m
Width	3 m
Height Overall	3.1 m

Diesel
Fully Automatic
65 km/h
> 525 km
70%
40%
0.75 m
1.8 m
Standard
6.3 km/h
Torsion Bar

PROTECTION & LIFE SUPPORT SYSTEMS	5
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	16
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard



Data subject to change without notice.

ARMAMENT	
Main Armament	ARCT Anti-Tank Remote Controlled Turret that can be equipped with KORNET-E, MIZRAK-O, SKIF and other missiles
Secondary Armament (Coaxial)	7.62 mm MG
Fire Control System	Thermal Camera - Day Camera Laser Range Finder Gunner Control System Stabilised Electric Turret Drive

MISSION EQUIPMENT	-
Driver Vision System	Standard
Command and Control System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
	Crew Intercommunication System
Electrical System	24 V
Auxiliary Power Unit (APU)	Standard



IKAPLAN-10



The KAPLAN-10 is a new generation armoured combat fighting vehicle that has the ability to move together with main battle tanks.

The KAPLAN-10 platform design enables the integration of different types of subsystems that allow it to perform all kinds of missions.

The KAPLAN-10's compact silhouette combined with an advanced suspension system allows it to manoeuvre at high speeds in various terrains and weather conditions.

Personnel ingress and egress the vehicle through the rear access door. Power pack maintenance and repair operations are carried out via the cabin access hatch. For balance, the two fuel tanks are located at the rear and are fully armoured and isolated from the vehicle to increase personnel safety.

The KAPLAN-10 is one of the very few armoured vehicles that feature amphibious characteristics. Propulsion afloat is ensured by two rear-located propellers that allow the KAPLAN-10 to easily navigate in deep and fast flowing waters. In addition, the driver can enter the water without prior preparation.

The hull of the KAPLAN-10 is manufactured and integrated using a ballistic welding technique. The power pack and driver are located in the front of the vehicle while the commander and gunner are situated in the centre. The rear part also hosts the gunner's aid and room for additional crew members.

Laser-protected glass periscopes with a wide field of view provide the driver a high situational awareness. Integrated night vision systems are standard in all

The vehicle is in service with the Turkish Land Forces in the Anti-Tank configuration.





MAV Technical Specifications

GENERAL	
Power-to-weight Ratio	20 Hp/ton
Crew	21 (Incl. Gunner, Driver and Commander)
Length	8.3 m
Width	3.3 m
Height Overall	3.8 m

	MOBILITY	
	Engine	Diesel
	Transmission	Fully Automatic
	Max. Road Speed	70 km/h
	Gradient	60%
	Side Slope	40%
	Vertical Obstacle	0.9 m
	Trench Crossing	2 m
	Amphibious Capability	Standard
	Max. Water Speed	7 knots
	Suspension System	Torsion Bar
	Steering System	Through Transmission
*		

PROTECTION & LIFE SUPPORT SYSTEMS	
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
Self-Righting Capability	Standard
Smoke Grenade Dischargers	8
Integrated Smoke Generator	Standard
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard

Data subject to change without notice.

ARMAMENT	
Turret Type	Remote Controlled
Main Armament	40 mm AGL & 12.7 mm MG
Elevation	-7° to +45°, Electrical
Traverse	360° Continuous
Siaht System	Day & Night Sight

MISSION EQUIPMENT	-
360° Situational Awareness	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
	Crew Intercommunication System
Electrical System	24 V







During the beach-landing phase of amphibious operations, these vehicles are launched from amphibious assault ships and are able to rapidly cover the distance between the vessel and the shore, allowing marine units to land under armour protection. MAV have all the features and capabilities of both a military land vehicle and a military marine vessel, by balancing the land and sea requirements. This dual role by definition, vehicle offers high performance both on land and water operations.

A unique hull design and powerful water jets make the MAV highly mobile in the water with a speed of 7 knots, as well as on land, at 70 km/h maximum speed. It is capable of self-righting ability in case of capsizing and/or operating at harsh sea/ocean conditions. Thanks to its long cruising range, it offers seaborne, land to sea and land-to-land capabilities. Once on land, they are able to operate alongside with main battle tanks and other mechanised manoeuvre units.

MAV has higher ballistic and mine protection compared to its predecessors and is equipped with today's most advanced mission equipment. Very few manufactures have this capability worldwide and FNSS is one of the few suppliers in NATO within a hot production line to produce this type of vehicles.

MAV is fitted with CAKA Remote Controlled Turret with the ability to carry a maximum load of ready-to-fire rounds and ballistic protection. FNSS CAKA RCT features advantages with its; water resistance structure, light weight, better protection for the gunner, target acquisition, automatic target tracking, stabilisation, reliability, accuracy and increased usable volume inside the vehicle.

The base vehicle can be configured in different variants such as personnel carrier, battlefield support, beach recovery, combat engineering and command post configurations. The new MAV's are fully qualified and are in service within the new landing helicopter dock (LHD) TCG-ANADOLU of the Turkish NAVY.

MAV outperforms its predecessors in terms of;

- Number of personnel and equipment to be transported in the
- Ballistic and mine protection levels,
- Performance criteria to be met on land and in water and
- New generation remote controlled turret.



ACV AD Technical Specifications

GENERAL	
Crew	3 or 4 (Including Driver)
Length	7 m
Width	3.9 m
Height Hull Roof	2.2 m

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	65 km/h
Range	500 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.8 m
Trench Crossing	2 m
Fording Depth	1 m
Amphibious Capability	Standard (On Korkut Platform)
Cuananaian Cuatam	Toroion Por

Data subject to change without notice.

PROTECTION & LIFE SUPPORT SYSTEMS	
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard

MISSION EQUIPMENT	
Driver Vision System	Night Vision Periscope AN/VVS-2
Electrical System	24 V
Auxiliary Power Unit (APU)	Standard









Thanks to an increased power pack performance and an improved suspension the ACV AD platform has the capacity to carry greater payloads compared to other heavy air defence platforms. The ACV AD also provides ballistic and mine protection.

The configuration of the vehicle can be changed to suit the operational requirements of the user. The ACV AD constitutes an ideal platform for air defence, command-and-control, long range mobile radar systems, artillery fire support, logistic support, ammunition carrier and self-propelled artillery and missile systems.

The ACV AD was selected by the Turkish Armed Forces as the platform of choice for its KORKUT and HISAR Air Defence Systems programmes.

The Command-and-Control configuration designed under the KORKUT Project is fully amphibious and has the capability of propelling itself in deep and/or fast flowing waters.

The Low and Medium Altitude Air Defence Missile System (LAADMIS) designed for the HISAR Project has a 3D Search Radar as well as a Low Altitude Air Defence Missile System installed on the same platform. These features make HISAR unique in its weight class thanks to its capability to perform commandand-control and fire missions from the same platform.





ACV-19 Technical Specifications

GENERAL	
Combat Weight	18,000 kg
Crew	13 (Incl. Gunner, Driver and Commander)
Length	6.02 m
Width	2.94 m
Height Overall	2.69 m

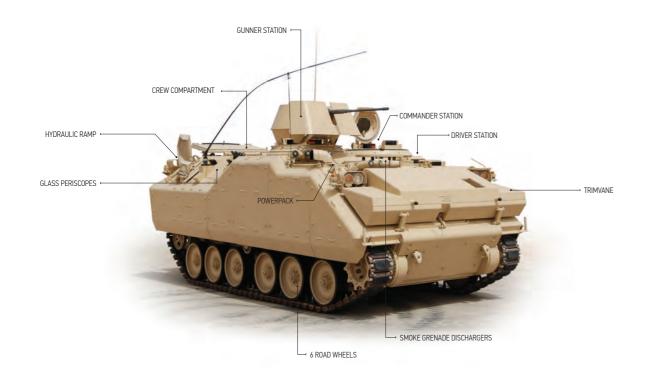
MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	65 km/h
Range	490 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.70 m
Trench Crossing	1.83 m
Amphibious Capability	Standard
Suspension System	Torsion Bar
Steering System	Through Transmission

Data subject to change without notice.

;
8
Optional
Optional
Standard
Optional

Manned and Remote Controlled Turrets,
Mortar and/or Missile Systems from
Various Types and Origin Can be Integrated

MISSION EQUIPMENT		
Driver Vision System	Thermal Cam. & Display	
Electrical System	24 V	



IACV-19

ARMOURED COMBAT VEHICLE



The ACV-19 (Armoured Combat Vehicle) is the general name for 15-19 ton weight class, modern high performance vehicles derived from the highly successful FNSS ACV. These vehicles have proven themselves with numerous armies worldwide. The ACV-19 offers the latest developments in high value vehicle performance for internal volume and payload but maintains the advantages of commonality with the ACV family of vehicles.

The differences between the ACV-15 and the ACV-19 consist primarily of a longer, stretched hull with 6 road wheels, heavy duty final drives, and suspensions. The ACV-19 offers more volume under armour and more payload capacity than the ACV-15. Consequently, the ACV-19 chassis can support heavier payloads such as larger turrets without compromising the mobility offered by the ACV-15. Additionally, the 90% spare part commonality among ACV-19s and ACV-15s makes maintenance more convenient for users of both variants.

The ACV-19 chassis are provided with a unique, space laminated armour system combining steel and aluminium technology to provide a high level of armour protection against direct kinetic energy threats. The hull provides protection against mines as well.

The vehicle is upgradeable thanks to its growth potential and its configuration can be tailored in accordance with user requirements into a true family of vehicles that can be utilized as cavalry, infantry, MBT's support vehicles and artillery.







ACV-19 IFV25

The ACV-19 IFV25 is fitted with a stabilised 25 mm manned or remote controlled SABER turret and carries 11 personnel including driver, commander, and gunner.



ACV-19 AAPC

The AAPC variant is the Advanced Armoured Personnel Carrier configuration of the ACV-19. The vehicle is armed with a SANCAK Remote Controlled Turret or with a 12.7 mm MG installed on a pintle or light protected mount, and carries 13 personnel including driver, commander, and gunner.



ACV-19 TLC

The TLC variant is the Tracked Logistics Carrier configuration of the ACV-19 FoV. It is configured with a fully armoured driver and crane operator cabin placed in the front left side of the vehicle. An open flat cargo bed is available at the rear to carry loads and logistic supplies. It is equipped with a hydraulic crane to load and unload the heavy materials carried by the vehicle. It is also equipped with a self-recovery winch and a 12.7 mm MG fitted on top of the vehicle. It is capable of transporting 6,000 kg of ammunition and general cargo to forward areas to support field units. The vehicle carries 2 personnel, consisting of a driver and a gunner or crane operator.



ACV-19 AMEV

The ACV-19 AMEV is a highly manoeuvrable, tracked armoured ambulance designed primarily for casualty evacuation from the front line. It can carry a driver and a medic with either 2 patients on stretchers and 4 seated patients, or 8 seated patients.



ACV-19 CPV

The ACV-19 CPV is the Command Post variant of the ACV-19 FoV. It is used as an operational staff officer's command post at Brigade and Battalion level. It can also be configured as a Fire Direction Centre. The vehicle is armed with a SANCAK Remote Controlled Turret or with a 12.7 mm MG installed on a pintle or light protected mount, and it carries 8 personnel including driver, vehicle commander, and staff officers.



ACV-19 SPM120

The SPM120 variant is the Self-Propelled Mortar configuration that provides indirect fire support. The vehicle is armed with a 120 mm mortar and a self-defence 7.62 mm or 12.7 mm MG. It carries 5 personnel including driver, commander/gunner and 3 mortar crew.



ACV-19 LGM-V

The LGM-V is the laser guided missile carrier vehicle configuration of the ACV-19 FoV. Eight rounds of ready-to-fire laser guided missiles are installed in the remote-control missile launcher turret. The missiles are capable of destroying enemy bunkers as well as light and medium armoured vehicles. The vehicle can carry 4 personnel and 8 spare Laser Guided Missiles stored inside the vehicle.

ACV-15 Technical Specifications

GENERAL	
Weight	14,000 kg
Crew	11 (Incl. Gunner; Driver and Commander)
Length	5.56 m
Width	2.90 m
Height Overall	2.97 m
Height Hull Roof	2.01 m

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	65 km/h
Range	490 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.74 m
Trench Crossing	1.83 m
Amphibious Capability	Standard
Max. Water Speed	6.3 km/h (with Track Propulsion)
Suspension System	Torsion Bar
Steering System	Through Transmission

Data subject to change without notice.

Smoke Grenade Dischargers	12 (24 Optional)
Automatic Fire Suppression System	Optional
CBRN Protection System	Standard
A/C and Heater	Optional
ARMAMENT	
Turret Type	Stabilised manned or remote controlled SABER Turret
Crew / Operator	1 (Person)
Main Armament	25 mm Automatic
Secondary Armament (Coaxial)	7.62 mm MG
Traverse	360° Continuous
Elevation	- 8° to + 48°
Sight System	Day & Night Sight

PROTECTION & LIFE SUPPORT SYSTEMS

MISSION EQUIPMENT	
Driver Vision System	Thermal Cam. & Display
Electrical System	24 V



IACV-15 ARMOURED COMBAT VEHICLE



Armoured Combat Vehicle (ACV) is the generic designation for a tracked, diesel engine powered, heavy armoured platform in the 13-15 tons class, capable of performing combined arms operations with main battle tanks. The platform design allows integrating different subsystems for executing a variety of different roles. The Armoured Personnel Carrier (APC) chassis forms the base vehicle for all other members of the ACV-15 Family of Vehicles.

The ACV-15 is a tracked (5 road wheels), lightweight, low silhouette armoured vehicle capable of high-speed operations in desert conditions, poor infrastructure, roads and/or highways. Personnel access the vehicle through hatches located on the top and via the rear hydraulic ramp, which also features an integrated door. A large cargo hatch cover is provided in the top deck, behind the turret. Access for servicing and maintenance of the power plant, located in the front right section of the vehicle, is through internal covers and through a cover at the front of the vehicle. Two armoured fuel tanks are located at the rear of the vehicle for weight distribution and crew safety. The tanks are separated from the vehicle by an armour plate.

The hull is made of ballistic aluminium plates. Plate thickness varies on the different planes of the hull to meet ballistic requirements.

The all-welded construction provides a watertight hull; and hatches, doors, and other openings have watertight seals. The power plant and the driver's and commander's compartments in the forward area utilize about half the space, the turret section, and the personnel compartment in the rear utilizes the remaining half.

FNSS has produced more than 2,500 ACV-15s for Turkish Land Forces and users worldwide.



VARIANTS





The AAPC variant is the Advanced Armoured Personnel Carrier configuration of the ACV-15 vehicles. The vehicle is armed with the SANCAK Remote Controlled Turret or with a 12.7 mm MG installed on a pintle or light protected mount, and can carry 13 personnel including driver, commander and gunner.



The SPM variant is the Self-Propelled Mortar configuration that provides indirect fire support. The vehicle is armed with a 81 mm mortar and a self-defence SANCAK RCT or a with a 12.7 mm MG installed on a pintle or light protected mount, It can carry 5 personnel including driver, commander and 3 mortar crew.



The ARV variant is the Armoured Recovery Vehicle configuration of the ACV-15 FoV. It is fitted with a hydraulic crane mounted on the vehicle's top plate and a hydraulic recovery winch with a fairlead assembly mounted inside the vehicle, which facilitates the recovery and towing of both armoured and non-armoured vehicles in difficult terrains. It is armed with a self-defence 12.7 mm MG and can carry 4 personnel including driver, gunner, and 2 technicians.



The AIFV is fitted with a stabilised 25 mm manned or remote-controlled SABER turret and can carry 11 personnel including driver, commander and gunner.



ANTI ARMOR - TOW

The Anti-Armour-TOW is a mobile armoured platform fitted with a Remote-Controlled Antitank Turret armed with the TOW system. It has the capacity of carrying guided antitank rounds stowed inside the vehicle and 4 personnel; driver, commander, gunner, and loader.





FITTERS

The FITTERS variant is the Recovery & Maintenance Vehicle configuration of the ACV-15 FoV. It is distinguished by the large hatch on top of the hull and the hydraulic crane capable of lifting a complete powerpack if required. The additional flotation panel on the trim vane helps compensate for the weight of the hydraulic crane. It is armed with a self-defence 12.7 mm MG and can carry 4 personnel including driver, gunner and two technicians.



The AESV variant is the Armoured Engineering Squad Vehicle configuration of the ACV-15 FoV. It can be armed with a self-defence SANCAK RCT or with a 12.7 mm MG installed on a pintle or light protected mount, and can carry 11 personnel including driver, commander, gunner, and combat engineers.



The CPV is the Command Post Vehicle variant of the ACV-15. It is used as an operational staff officer's command post at Brigade and Battalion level. It can also be configured as a Fire Direction Centre. The vehicle is armed with SANCAK RCT or with a 12.7 mm MG installed on a pintle or light protected mount, and can carry 6 personnel including driver, vehicle commander and staff officers.



The AMEV is a highly manoeuvrable, tracked armoured ambulance designed primarily for casualty evacuation from forward battle areas. It can carry a driver, a medic with either 2 patients on stretchers and 4 seated patients, or 8 seated patients.



AFOV variant is the Artillery Forward Observation Vehicle configuration of the ACV-15 FoV. It is equipped with an APU and mast mounted optronic devices and radar sensors for battlefield surveillance and target acquisition. It is armed with a self-defence SANCAK RCT or with a 12.7 mm MG installed on a pintle or light protected mount, and can carry 5 personnel including driver, commander, gunner, and system operators.

WHEELED ARMOURED COMBAT VEHICLES







PARS ALPHA 8x8 New Generation Armoured Fighting Vehicle Technical Specifications

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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)

Height	< 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 SYSTEM	MS
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/s² (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
Communication Equipment	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 464 Isolated High Power for Mission Equipment
Auxiliary Power Unit (APU)	Optional





PARS ALPHA 8x8 WHEELED ARMOURED COMBAT VEHICLES NEW GENERATION ARMOURED FIGHTING VEHICLE

PARS ALPHA 8x8 New Generation **Armoured Fighting Vehicle**

OVERVIEW

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, rideheight 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 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.



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

Advanced Weapon Integration

The new generation PARS ALPHA 8x8 comprises the integration of advanced weaponry. TEBER-II 30/40 remotecontrolled 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.

Unique Situational Awareness ® **Superior Crew Coordination**

Since the late Cold War era, front-sideengine 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.



IPARS 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



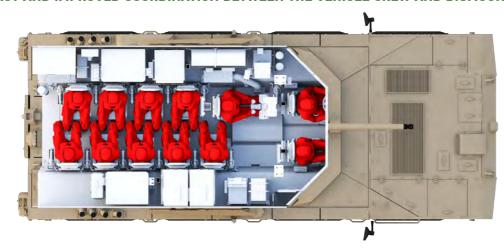
PARS ALPHA 8x8 Command Control & Fire Support Vehicle

TRANSPORTABILITY

WHEELED ARMOURED COMBAT VEHICLES



EYE CONTACT AND IMPROVED COORDINATION BETWEEN THE VEHICLE CREW AND DISMOUNTS



ADDITIONAL AVAILABLE INTERNAL VOLUME FOR LOGISTICS & MISSION EQUIPMENT



Data subject to change without notice.

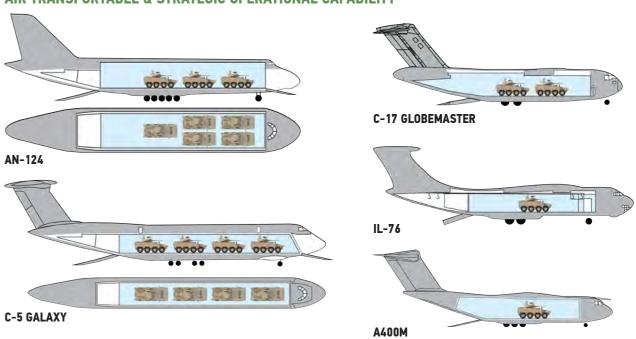




LOWER SILHOUETTE WITH HIGHER INTERNAL VOLUME



AIR TRANSPORTABLE & STRATEGIC OPERATIONAL CAPABILITY



TRANSPORTABLE BY RAILWAY



Data subject to change without notice.



PARS IV 8x8 Technical Specifications

GENERAL	
Power-to-weight Ratio	> 19 Hp/ton
Crew	9 + 3 (Inc. Gunner, Driver & Commander)
Length	< 8.4 m
Width	< 3.1 m
Height	< 2.5 m
MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 6 speed forward, 1 speed reverse
Max. Road Speed	> 100 km/h
Creep Speed	< 5 km/h
Range	> 1000 km
Gradient	60%
Side Slope	30%
Angle of Approach	> 35°
Angle of Departure	> 35°
Vertical Obstacle	0.7 m
Trench Crossing	2.4 m
Turning Radius	< 8.5 m
Fording Depth	2.1 m
Suspension System	Independent, Double Wishbone, Hydro- Pneumatic Suspension with Ride Height Control
Number of Axles	4
Driven Axles	All Wheel Drive
Steered Axles	1, 2, 3, 4
Transfer Case	2 Speed
Service Brakes	Pneumatic and ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Controlled

Data subject to change without notice.

PROTECTION & LIFE SUPPORT SYSTE	MS
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
IED Protection	STANAG 4569 (Level Classified)
Laser Warning System	Optional
Gunshot Detection System	Standard
Smoke Grenade Dischargers	12
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard
ARMAMENT	
Туре	Manned and Remote Controlled Turrets, Mortar and/or Missile Systems from Various Types and Origin Can be Integrate
MISSION EQUIPMENT	
360° Situational Awareness System	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 464 Isolated High Power for Mission Equipme
Auxiliary Power Unit (APU)	Optional





IPARS IV 8x8 NEW GENERATION WHEELED ARMOURED VEHICLE



The PARS IV 8x8 New Generation Wheeled Armoured Vehicle (NG-WAV) was designed and produced with FNSS' equity, considering the technical features that have evolved according to future requirements and the demands from armies worldwide. The vehicle combines user ergonomics with protection and high mobility.

The PARS IV 8x8 NG-WAV has been renewed in order to adapt to different combat environments, and has been updated to accommodate constantly developing technologies and to offer its users tactical advantages on the battlefield. The vehicle is developed to adapt to today and future hybrid warfare conditions that bring together symmetric and asymmetric threats.

The elements that determine the operational capabilities of the PARS IV 8x8 in the field; protection, firepower, mobility and electronic infrastructure, were adapted to multiple operational scenarios.

Thanks to its modular structure, the PARS IV 8x8 has been designed to be configured in different variants that can serve as infantry fighting vehicle, reconnaissance, command and control, personnel carrier, mortar carrier, combat engineering, CBRN and recovery

The two-man driver's front cabin of the PARS IV 8x8, allows to operate day and night in all terrain and weather conditions, and provides more than 180° of visibility and a high level of driving safety under armour. Panoramic periscopes at the front of the vehicle, as well as driving and thermal cameras at the front and rear, provide high situational awareness to the driver and commander. This allows performing all kinds of tasks safely under armour protection, without opening the driver's hatch.

The PARS IV 8x8 superior mobility is due to its power unit, to the balanced load distribution and to the fully independent, height-adjustable, hydropneumatics suspensions designed to support every mission. Thanks to the all-wheel steering system, the vehicle can turn in a radius as long as its length and can easily manoeuvre in urban areas.

The modular armour system and special hull design provide the highest ballistic, mine and IED protection in its class. The ballistic protection level can also be increased according to users' requirements.

The PARS IV 8x8 NG-WAV offers a combination of the highest mobility and protection of the PARS family and the ability to engage the evolving threats of the modern battlefield.





PARS IV 6x6 S-Ops Personnel Carrier Vehicle Technical Specifications

Data subject to change without notice.

GENERAL	
Combat Weight	26,000 kg
Length	< 7 m
Width	< 3 m
Height Hull Roof	< 2.45 m
Air Transportation	A400M, C-5, C-17, IL-76 and AN-124

All Harisportation	A400M, C-3, C-17, IL-70 and AN-124
MOBILITY	
Engine	Diesel
Transmission	
	Fully Automatic, 7 Forward - 2 Reverse
Max. Road Speed	> 100 km/h
Creep Speed	< 4 km/h
Range	> 700 km
Gradient	60%
Side Slope	30%
Angle of Approach	50°
Angle of Departure	40°
Vertical Obstacle	0.6 m
Trench Crossing	1.5 m
Turning Radius	<7
Fording Depth	1.5 m
Suspension System	Independent, Double Wishbone, Hydro- Pneumatic Suspension with Ride Height Control
Number of Axles	3
Driven Axles	All Wheel Drive
Steered Axles	1 & 3
Transfer Case	Single Speed
Service Brakes	Pneumatic and ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Controlled

S
STANAG 4569 (Level Classified)
STANAG 4569 (Level Classified)
STANAG 4569 (Level Classified)
Optional
Standard
12
Standard
Standard
Standard

A/C and Heater	Standard
ARMAMENT	
Turret Type	SANCAK RWS • Two Independent and Simultaneously Controlled Turrets Front and Rear • Stabilised and Day/Night • Ballistic Protected • Universal Mount • 12.7 mm MG • 7.62 mm MG • 40 mm AGL
Optional Turret and Ammunition	SABER RCT (25 mm)
	Fixed Wing Loitering Munition System
	-
MISSION EQUIPMENT	
360° Situational Awareness	Standard
Driver Vision System	Standard

MISSION EQUIPMENT	
360° Situational Awareness	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461
Auxiliary Power Unit (APU)	Optional





PARS IV 6x6

SPECIAL OPERATIONS VEHICLE

The PARS IV 6x6 Special
Operation's (S-Ops) Vehicle is
designed to meet the tactical
and operational requirements of
military and internal security forces
whose mission is «special». It is
able to operate in a wide range
of terrains, climate types and is
optimized for different operational
requirements. It is highly versatile,
reflecting the broad spectrum of
potential missions and areas of
operation.

The PARS IV 6x6 S-Ops Vehicle operates in all weather and all terrain conditions, day and night, including cross-country and urban areas. The vehicle has been specifically designed to carry special operations units to their mission objectives where multiple threats can be in place and provide fire support to the special operation teams in the field. All team members enjoy a high level of electro-optic situational awareness.

The vehicle special design provides the driver and personnel located in the front section of the vehicle with maximum direct view situational awareness, of over 180°.

The new generation electronic infrastructure provides 360° situational awareness for all team members. Owing to these features, the vehicle can easily be operated under armour at all times keeping hatches closed. The vehicle's weapon system is designed to engage multiple targets simultaneously from all directions including high grounds. Two remote controlled turrets are located at the front and rear of the vehicle.



PARS IV 6x6 Command, Control and Signal Vehicle SANCAK RWS



The turrets are fitted with a universal weapon mount which enables them to carry 7.62 mm, or 12.7 mm machine guns, or 40 mm automatic grenade launchers, which can be easily changed depending on mission requirements. Two-axis stabilisation allows firing on the move and the high maximum elevation of the guns enables to engage targets on high grounds (building tops, cliffs etc) and/or low altitude aerial targets.

The PARS IV 6x6 S-Ops Vehicle provides an unmatched optimum combination of the survivability of an MRAP and the tactical mobility of a wheeled armoured combat vehicle. The vehicle's high level of ballistic, mine and IED protection along with the RPG net is designed to protect the crew and the powerpack against unconventional threats where the timing and intensity of the

performance powerpack and ride-height adjustable independent, hydropneumatic suspension system provide unmatched tactical mobility to overcome difficult terrain and road conditions, as well as drive safety and comfort for the crew.

threat cannot be estimated. The high

Front and rear axle steering provides a turning radius narrower than a 4x4 vehicle. This unique feature enables rapid manoeuvre capability in narrow spaces, especially in low infrastructure urban areas.

The vehicle is equipped with new generation mission equipment that ensures combat effectiveness, safer route planning, command/control and rapid targeting.



PARS IV 6x6
Personnel Carrier
2 x SANCAK RWS



PARS IV 6x6 Fire Support Vehicle 25 mm SABER RCT

PARS III 8x8 Technical Specifications

GENERAL	
Combat Weight	30,000 kg
Crew	9+3
Length	< 8 m
Width	< 3 m
Height Hull Roof	< 2.4 m
Air Transportation	A400M, C-17 and C-5
MOBILITY	

Air Transportation	A400M, C-17 and C-5
MOBILITY	
Engine	Diesel
Transmission	Fully Automatic 7 Forward 1 Reverse
Max. Road Speed	100 km/h
Creep Speed	3 km/h
Range	> 800 km
Gradient	60%
Side Slope	30%
Angle of Approach	50°
Angle of Departure	40°
Vertical Obstacle	0.7 m
Trench Crossing	2 m
Turning Radius	< 8 m (Curb to Curb)
Amphibious Capability	Optional
Suspension System	Independent, Double Wishbone, Hydro- Pneumatic Suspension with Ride Height Control
Number of Axles	4
Driven Axles	All Wheel Drive
Steered Axles	1, 2, 3, 4
Transfer Case	2 Speed
Service Brakes	Hydraulic and ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Controlled

Data subject to change without notice.

PROTECTION & LIFE SUPPORT SYSTE	MS
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard
ARMAMENT	
Туре	Manned and Remote Controlled Turrets, Mortar and/or Missile Systems from Various Types and Origin Can be Integrated
MISSION EQUIPMENT	
360° Situational Awareness	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461 Isolated High Power for Mission Equipment
Auxiliary Power Unit (APU)	Optional





WHEELED ARMOURED COMBAT VEHICLE (WACV)

IPARS III 8x8

OVERVIEW

The PARS III 8x8 has been developed with special emphasis on mobility, protection, payload, and growth potential. It is equipped with cutting edge armoured vehicle technologies to obtain performances and durability answering modern armies' operational requirements.

The PARS III 8x8 combat weight is 30,000 kg, and the vehicle is powered by a diesel engine. The power pack consists of a water-cooled diesel engine, coupled to a fully automatic transmission, allowing a maximum road speed up to 100 km/h. The PARS III 8x8 can overcome a 60% vertical and a 30% side slope, climb 0.7 meters-high obstacles and cross 2 meters-wide trenches. Thanks to its unique design with its powerpack location and optimal weight balance, the vehicle has an almost equal load on each axle. This design approach gives the vehicle the ability to move comfortably even on loose and soft terrain, providing maximum control at high-speed and short braking distances. The vehicle has 8x8 driving characteristics, and all of its axles can be locked when necessary. The central tire inflation system allows the driver to adjust the tire pressure to suit different terrain conditions.

The PARS III 8x8 all-axle steering system gives the vehicle the lowest turning radius in its class at 8 meters. The ability of gradual decreasing the steer-by-wire angle of the rear axles and their locking over certain speeds, together with the ABS system and the engine brake, all contribute to enhanced driving safety.

The two-man driver's section is located in front of the vehicle, which offers more than 180° horizontal field of view and a high level of driving safety and comfort.



Large glass periscopes, and front driving and manoeuvre cameras with thermal cameras located at the front and rear of the vehicle provide high-level situational awareness for the driver and commander. Thanks to ergonomic door design, personnel seats, rifle holders and interior lighting elements are all designed to ensure maximum crew comfort in the vehicle, which can accommodate up to nine dismounts. With a range of over 800 km, the PARS III 8x8 is fitted with safety fuel tanks against punctures and explosion, a reserve fuel tank under-armour being also available in emergency situations.

Thanks to the modular design of the PARS III 8x8 hull and to that of its armour package, the vehicle protection level, both against ballistic and mine threats, can be tailored to customers' requests,

The hull shape, underbelly structure, base plates and specially developed mine-resistant seats are designed to protect personnel against high-level mine threats.

The PARS III 8x8 vehicle runs ahead of its competitors by offering ballistic and mine protection levels similar to MRAP vehicles while maintaining combat and mobility characteristics of modern armoured combat vehicles. The PARS III 8x8 has an integrated air-conditioning system, which keeps the vehicle's internal temperature at +25 °C even in the hottest desert conditions.

The modular connection of the vehicle subsystems to the mine-resistant hull ensures ease of maintenance and replacement. This ease of maintenance and the easy replacement of moving parts and the power transmission systems in particular make the PARS III 8x8 superior to its counterparts. The powerpack architecture, which can be disassembled and reassembled in less than 60 minutes, gives the user the freedom to replace the engine while on the field, providing maximum readiness levels in combat situations.



PARS III 8x8 IFV

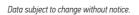
The IFV variant is the Infantry Fighting Vehicle configuration of the PARS III 8x8 FoV. The vehicle is armed with a stabilised manned or remote controlled SABER 25 Turret armed with a 25 mm automatic cannon and can carry up to 11-12 personnel including driver, commander and



The ICV variant is the Infantry Carrier Vehicle configuration of the PARS III 8x8 FoV. The vehicle is armed with a SANCAK 12.7 mm remote controlled turret station (RCTS) and can carry up to 12 personnel including driver, commander and gunner.



The CFV variant is the Cavalry Fighting Vehicle configuration of the PARS III 8x8 FoV. The vehicle is fitted with a TEBER manned or remotecontrolled turret armed with a 30 or 35 mm cannon, and can carry up to 7 personnel (manned turret) or 11 personnel (remote controlled turret) including driver, commander and gunner.



VARIANTS



PARS III 8x8 SPM

The SPM variant is a Self-Propelled Mortar configuration that provides indirect fire support. The vehicle can be armed with an 81 or 120 mm mortar and a self-defence SANCAK remote controlled turret with 12.7 mm MG. It carries 4 personnel including driver, commander and 2



PARS III 8x8 CP

The CP is the Command post variant of the PARS III 8x8 FoV. It is used as an operational staff officer's command post at Brigade or Battalion echelon. It can also be configured as a Fire Direction Centre. The vehicle is armed with a self-defence SANCAK remote controlled turret with 12.7 mm MG and carries 8 personnel including driver, vehicle commander and staff officers.



PARS III 8x8 AMEV

The AMEV is the Armoured Medical Evacuation Vehicle configuration of the PARS III 8x8 FoV. The vehicle is highly manoeuvrable and designed primarily for casualty evacuation from front lines. It carries a driver, commander, and 2 medics with either 2 patients on stretchers and 4 seated patients, or 8 seated patients.



PARS III 8x8 ENGINEERING VEHICLE

The PARS III 8x8 Engineering Vehicle clears surface laid mines and threats found within the path of the total width of the vehicle, from roads, tracks and rough terrain, opening a cleared route for the mechanized infantry and follow-on vehicles. It carries 6 personnel including driver, commander and 4 sappers.



PARS III 8x8 ARV

The ARV variant is the Armoured Recovery Vehicle configuration of the PARS III 8X8 FoV. The ARV is fitted with a hydraulic crane mounted on the vehicle top plate and a hydraulic recovery winch mounted inside the vehicle, which facilitates the recovery and towing of both armoured and unarmoured vehicles. It is armed with a self-defence 7.62 or 12.7 mm MG and carries 4 personnel including driver, commander and 2 technicians.



PARS III 6x6 Technical Specifications

GENERAL	
Combat Weight	25,000 kg
Crew	9
Length	< 7 m
Width	< 2.9 m
Height Hull Roof	< 2.4 m
Air Transportation	A400, C-17, C-5

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 7 Forward, 1 Reverse
Max. Road Speed	100 km/h
Creep Speed	3 km/h
Range	> 800 km
Gradient	60%
Side Slope	30%
Angle of Approach	50°
Angle of Departure	40°
Vertical Obstacle	0.7 m
Trench Crossing	1.75 m
Turning Radius	< 7 m (Curb to Curb)
Amphibious Capability	Optional
Suspension System	Independent, Double Wishbone, Hydro- Pneumatic Suspension with Ride Height Control
Number of Axles	3
Driven Axles	All Wheel Drive
Steered Axles	1, 3
Transfer Case	2 Speed
Service Brakes	Hydraulic and ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Controlled

Data subject to change without notice.

Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard
ARMAMENT	
Туре	Manned and Remote Controlled Turrets and Missile Systems from Various Types and Origin Can be Integrated
MISSION EQUIPMENT	
360° Situational Awareness	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
0	VHF/UHF Radios
Communication Equipment	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461 Isolated High Power for Mission Equipment
Auxiliary Power Unit (APU)	Optional

PROTECTION & LIFE SUPPORT SYSTEMS



PARS III 6x6

WHEELED ARMOURED COMBAT VEHICLE (WACV)

OVERVIEW

The PARS III 6x6 has been developed with a special emphasis on mobility, protection, payload, and growth potential. It is equipped with cutting edge armoured vehicle technologies to obtain performances and durability answering modern armies' operational requirements.

The PARS III 6x6 combat weight is 25,000 kg and is powered by a diesel engine. The powerpack consists of a water-cooled diesel engine, coupled to a fully automatic transmission that allows a maximum road speed up to 100 km/h. The PARS III 6x6 is capable of manoeuvring on a 60% vertical and a 30% side slope, climbing 0.7 meters high obstacles and crossing 1.75 meters wide trenches. Thanks to its unique design with its powerpack location and optimal weight balance, the vehicle has almost equal load on each axle.

This design approach gives the vehicle the ability to move comfortably even on loose and soft terrain, providing maximum control at high-speed and short braking distances. The vehicle has 6x6 driving characteristics, and all of its axles can be locked when necessary. The central tire inflation system allows the driver to adjust the tire pressure to suit different terrain conditions.

The PARS III 6x6 front and rear axle steering system gives the vehicle the lowest turning radius in its class. The ability of gradual decreasing the steerby-wire angle of the rear axles and their locking over certain speeds, together with the ABS system and the engine brake, all contribute to enhanced driving safety.



The two-man driver's section is located in front of the vehicle, which offers more than 180° horizontal field of view and a high level of driving safety and comfort. Large glass periscopes, and front driving and manoeuvre cameras with thermal cameras located at the front and rear of the vehicle provide high-level situational awareness for the driver and commander. The door covers, personnel seats, rifle holders and interior lighting elements are all designed to ensure maximum crew comfort in the vehicle, which can accommodate up to nine personnel. With a range of over 800 km, the PARS III 6x6 has fuel tanks incorporating special measures to protect against explosion and puncture, an under-armour reserve fuel tank being also available in emergency situations.

Thanks to the modular design of the PARS III 6x6 hull and to that of its armour package, the vehicle protection level, both against ballistic and mine threats, can be tailored to customers' requests,

The hull form, underbelly structure, base plates and specially developed mine-resistant seats are designed to protect personnel against high-level mine threats. The PARS III 6x6 vehicle runs ahead of its competitors by offering ballistic and mine protections levels similar to MRAP vehicles while maintaining combat and mobility characteristics of modern armoured combat vehicles.

The PARS III 6x6 has an integrated airconditioning system, which keeps the vehicle's internal temperature at +25 °C even in hottest desert conditions.

The modular connection of the vehicle subsystems to the mine-resistant hull ensures ease of maintenance and replacement. This ease of maintenance and the easy replacement of moving parts and the power transmission systems in particular make the PARS III 6x6 superior to its counterparts. The powerpack architecture, which can be disassembled and reassembled in less than 60 minutes, gives the user the freedom to replace the engine while on the field, providing maximum readiness levels in combat situations.

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PARS SCOUT 8x8 Technical Specifications

GENERAL	
Power-to-weight Ratio	20 Hp/ton
Length	< 9 m
Width	< 3 m
Height Hull Roof	< 2.5 m
Air Transportation	A400M, IL-76 and AN-124
MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 6 Forward, 1 Reverse
Max. Road Speed	100 km/h
Range	> 800 km
Gradient	60%
Side Slope	30%
Angle of Approach	> 42°
Angle of Departure	> 35°
Vertical Obstacle	0.7 m
Trench Crossing	2 m
Turning Radius	< 8,5 m
Fording Depth	1.7 m
Suspension System	Independent, Double Wishbone, Hydro- Pneumatic Suspension with Ride Height Control

Data subject to change without notice.

PROTECTION & LIFE SUPPORT SYSTE	MS
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
IED Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard
ARMAMENT	
Туре	Manned and Remote Controlled Turrets and Missile Systems from Various Types and Origin Can be Integrated
MISSION EQUIPMENT	
360° Situational Awareness	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
Communication Equipment	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461
Auxiliary Power Unit (APU)	Optional



PARS SCOUT 8x8 Sensor Reconnaissance Vehicle



PARS SCOUT 8x8 CBRN Reconnaissance Vehicle



PARS SCOUT 8x8 Armoured Combat Vehicle

PARS SCOUT 8x8

SPECIAL PURPOSE VEHICLE (SPV)

OVERVIEW

The PARS SCOUT is the new member of the PARS vehicle family. These special purpose tactical wheeled vehicles provide high mobility in all terrain conditions and superior ballistic and mine protection and are equipped with modern technologies, providing strategic advantages to their users, including a high situational awareness. The PARS SCOUT 6x6 and 8x8 are designed especially for reconnaissance and internal security operations.

The PARS SCOUT 8x8 modern tactical wheeled armoured combat vehicle is designed to be used in low and highintensity scenarios, offering strategic advantages to the user thanks to its unique features, and incorporate the most advanced technologies. PARS SCOUT 8x8 has a power-to-weight ratio of 20 Hp/ton (includes payload), and reaches a maximum road speed of up to 100 km/h and is capable of manoeuvring on 60% vertical and a 30% side slope. climbing 0.7 meters high obstacles and crossing the 2 meters trenches.

Thanks to the engine layout and its balanced design, the vehicle's axle loads are almost equal. This design approach provides the vehicle with the ability to move comfortably even on loose and rough terrain while also providing maximum control at high-speed and short braking distances. The central tire inflation system (CTIS) allows the driver to adjust tire pressure to suit different terrains.





Under favour of hydro-pneumatic suspension system, the vehicle has the best road holding and ride height for different road conditions. PARS SCOUT 8x8's turning radius and the tire wear are minimized thanks to AWS (All Wheel Steering) System. PARS SCOUT 8x8 has a range of over 800 km, and it has underarmour protected fuel tanks. The vehicle is fitted with run-flat tires and with a self-recovery winch.

The driver compartment at the front of the vehicle is protected by ballistic glass, and provides a wide horizontal field of view, high driving safety, situational awareness and comfort. In addition, the glasses are adapted to winter conditions by heating system equipments.

The large ballistic windscreen, and the day/night cameras located at the front and rear give the driver and commander a wide field of view. Inside the vehicle doors and hatches, personnel seats and lighting elements are designed to provide comfort to personnel.

The PARS SCOUT 8x8 hull can be brought to the level of protection required thanks to its modular-designed armour system. The hull shape, underbelly structure, bottom plates and specially developed mine-resistant seats are designed to protect personnel against high-level mine threats.

The modular connection of the vehicle subsystems to its mine-resistant hull ensures ease of maintenance and quick replacement, which makes it superior to its counterparts.

PARS SCOUT 8x8 is designed in accordance with the integration of Manned or Remote Controlled Towers and Missile Systems, according to vehicle usage needs.

PARS SCOUT 8x8 Vehicle, which has a high locality rate, has domestic gearboxes designed and developed by FNSS with its own resources. Also, many sub-systems in the vehicle, especially the suspension system, are developed with domestic and national resources. PARS SCOUT 8x8 is otherness with the both personnel carrying and satisfy the expectation of modern armoured vehicle.



PARS SCOUT 6x6 Technical Specifications

GENERAL Power-to-weight Ratio 20 Hp/ton Length < 7.5 m Width < 3 m Height Hull Roof < 2.5 m A400M, IL-76 and AN-124 Air Transportation MOBILITY Engine Diesel Fully Automatic, 6 Forward, 1 Reverse Transmission 100 km/h Max. Road Speed Range > 800 km 60% Gradient 30% Side Slope > 42° Angle of Approach > 35° Angle of Departure 0.7 m Vertical Obstacle Trench Crossing 1.4 m Turning Radius < 7,5 m Fording Depth 17 m Independent, Double Wishbone, Hydro-Suspension System Pneumatic Suspension with Ride Height

Data subject to change without notice.

PROTECTION & LIFE SUPPORT SYSTEM	IS
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
IED Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard
ARMAMENT	_
Туре	Manned and Remote Controlled Turrets and Missile Systems from Various Types and Origin Can be Integrated
MISSION EQUIPMENT	
360° Situational Awareness	Standard
Driver Vision System	Standard
Battlefield Management System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
Communication Equipment	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461
Auxiliary Power Unit (APU)	Optional



PARS SCOUT 6x6 Command Vehicle



PARS SCOUT 6x6 Radar Vehicle

IPARS SCOUT 6x6

SPECIAL PURPOSE VEHICLE (SPV)

OVERVIEW

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The PARS SCOUT 6x6 modern tactical wheeled armoured combat vehicle is designed to be used in low and highintensity scenarios, offering strategic advantages to the user thanks to its unique features, and incorporate the most advanced technologies. PARS SCOUT 6x6 has a power-to-weight ratio of 20 Hp/ton (includes payload), and reaches a maximum road speed of up to 100 km/h and is capable of manoeuvring on 60% vertical and a 30% side slope, climbing 0.7 meters high obstacles and crossing the 1.4 meters trenches.

Thanks to the engine layout and its balanced design, the vehicle's axle loads are almost equal. This design approach provides the vehicle with the ability to move comfortably even on loose and rough terrain while also providing maximum control at high-speed and short braking distances. The central tire inflation system (CTIS) allows the driver to adjust tire pressure to suit different terrains.







Under favour of hydro-pneumatic suspension system, the vehicle has the best road holding and ride height for different road conditions. PARS SCOUT 6x6's turning radius and the tire wear are minimized thanks to AWS (All Wheel Steering) System. PARS SCOUT 6x6 has a range of over 800 km, and it has underarmour protected fuel tanks. The vehicle is fitted with run-flat tires and with a self-recovery winch.

The driver compartment at the front of the vehicle is protected by ballistic glass, and provides a wide horizontal field of view, high driving safety, situational awareness and comfort. In addition, the glasses are adapted to winter conditions by heating system equipments.

The large ballistic windscreen, and the day/night cameras located at the front and rear give the driver and commander a wide field of view. Inside the vehicle doors and hatches, personnel seats and lighting elements are designed to provide comfort to personnel.

The PARS SCOUT 6x6 hull can be brought to the level of protection required thanks to its modular-designed armour system. The hull shape, underbelly structure, bottom plates and specially developed mine-resistant seats are designed to protect personnel against high-level mine threats.

The modular connection of the vehicle subsystems to its mine-resistant hull ensures ease of maintenance and quick replacement, which makes it superior to its counterparts.

PARS SCOUT 6x6 is designed in accordance with the integration of Manned or Remote Controlled Towers and Missile Systems, according to vehicle usage needs.

PARS SCOUT 6x6 Vehicle, which has a high locality rate, has domestic gearboxes designed and developed by FNSS with its own resources. Also, many sub-systems in the vehicle, especially the suspension system, are developed with domestic and national resources. PARS SCOUT 6x6 is otherness with the both personnel carrying and satisfy the expectation of modern armoured vehicle.

PARS 4x4 Technical Specifications

GENERAL	
Power-to-weight Ratio	25 Hp/ton
Crew	4
Length	5 m
Width	2.6 m
Height Overall	3.1 m
Height Hull Roof	2.1 m
Air Transportation	C-130H, A400, C-17, C-5

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	110 km/h
Range	> 700 km
Gradient	70%
Side Slope	40%
Vertical Obstacle	0.4 m
Trench Crossing	0.8 m
Turning Radius	7.5 m
Amphibious Capability	Standard
Max. Water Speed	6.5 km/h
Suspension System	Double Wishbone, Independent and Helical Spring
Number of Axles	2
Driven Axles	All Wheel Drive
Service Brakes	Hydraulic and ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Released

Data subject to change without notice.

allistic Protection	STANAG 4569 (Level Classified)
ine Protection	STANAG 4569 (Level Classified)
noke Grenade Dischargers	8
tomatic Fire Suppression System	Standard
RN Protection System	Standard
C and Heater	Standard

ARMAMENT	
Main Armament (Option 1)	ARCT Anti-Tank Remote Controlled Turret that can be armed with KORNET-E, MIZRAK-O, SKIF and other missiles & 7.62 mm Co-Axial MG
Main Armament (Option 2)	SANCAK RWS Stabilised and Day/Night Ballistic Protected Universal Mount 12.7 mm MG 7.62 mm MG 40 mm AGL
Main Armament (Option 3)	SANCAK-30 • 30 mm Automatic Cannon
Secondary Armament (Coaxial)	7.62 mm MG
Fire Control System	Thermal Camera - Day Camera Laser Range Finder Gunner Control System Stabilised Electric Turret Drive
	-

MISSION EQUIPMENT	_
Command and Control System	Standard
Navigation System	Standard
Communication Equipment	VHF/UHF Radios
	Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461
Auxiliary Power Unit (APU)	Standard



PARS 4x4 Sensor Reconnaissance Vehicle



PARS 4x4 with KORNET-E ARC-T



PARS 4x4 with OMTAS ARC-T



PARS 4x4 with SANCAK-30 mm RCT

IPARS 4x4

WHEELED ARMOURED COMBAT VEHICLE (WACV)

OVERVIEW

The PARS 4x4 is designed to undertake special operational roles such as advanced surveillance, anti-tank and command and control.

The PARS 4x4 has a power-to-weight ratio of 25 Hp/ton, a low silhouette and amphibious capabilities. The vehicle with its crew of 4 can operate in deep and fast flowing waters without any preliminary preparation. Two propellers located at the rear provide the vehicle's enhanced propulsion and manoeuvrability in the water.

The PARS 4x4 can operate on any rough terrain with a low centre of gravity, fully independent suspension system, ABS-assisted hydraulic disc brakes, low ground pressure and increased angles of approach and departure. The PARS 4x4 can climb 70% vertical slopes and can hold on 40% side slopes. It can also overcome 0.4 meters high vertical obstacles with ease. Thanks to the hydraulic recovery winch, located at the front of the vehicle, it has the ability to provide self-recovery when required.

The mobility of the PARS 4x4 is enhanced by its central tire inflation system, and it also has a run flat capability thanks to its in-tire solid disc system. The PARS 4x4 can reach a maximum speed of 110 km/h on road and has a range of 700 km. It is fitted with an automatic transmission with an axle lock to enhance mobility on slippery surfaces and soft soil.







The driver's cabin features a transparent ballistic armour which offers a wide field of view for both the driver and the crew. The PARS 4x4 also provides the driver and the commander with integrated night and day vision cameras that enable operations in the dark with or without using blackout lights. The command and warning panels and the height-adjustable mine-protected seats have been specifically developed for the commander, driver, gunner and dismounts.

The vehicle is made of a ballistic hull, which provides protection against mines and improvised explosive devices (IED).

With its remarkable payload capacity, open architecture, and significant design, the vehicle is capable of carrying out various missions.









AACE Technical Specifications

GENERAL	
Weight	19,500 kg
Crew	2
Length	6.2 m
Width	3.3 m
Height	3.2 m

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	45 km/h
Range	400 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.4 m
Trench Crossing	1.5 m
Turning Radius	Pivot
Amphibious Capability	Standard
Max. Water Speed	8.6 km/h (with 2 Water Jets)

Data subject to change without notice.

PROTECTION & LIFE SUPPORT SYSTEMS	
Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	6
Automatic Fire Suppression System	Standard
CBRN Protection System	Standard
A/C and Heater	Standard

MISSION EQUIPMENT	
Driver Vision System	Standard
Recovery Winch	15,000 kg Capacity



ARMOURED AMPHIBIOUS COMBAT EARTHMOVER



The AACE is an amphibious, armoured, tracked, combat earthmover, designed for the preparation of river banks during river crossing missions. It is capable of performing bulldozing, rough grading, excavating, hauling, and scraping operations.

Compared to standard heavy-duty vehicles; the AACE has the capability to take in ballast from the soil into its ballast canister, and when necessary the vehicle can discharge its ballast canister at the end of the operation. In standard heavy-duty vehicles, the dozer blade is hydraulically operated while the vehicle is stable.

However, in the AACE it is fixed to the vehicle. With its adjustable hydraulic suspension system, the front section of the AACE can be shifted in the vertical axis. This capability enables the blade or ballast canister to make contact with the soil, and penetrate it. As a result, shovelling and plowing can be performed more efficiently.

One of the most important and unique features of the AACE is its amphibious capability. It can be operated with a crew of 2. In addition, the AACE is fitted with modern electronic systems such as day and night cameras, multi-function LCD monitor and air-conditioning system.

To provide the amphibious capability, together with the mine and ballistic protection requirements, the AACE hull structure is made of ballistic aluminium. Its modern hydraulic system and power transmission enables the vehicle to operate with high manoeuvrability and operational performance.

The AACE powerpack is based on a diesel engine coupled to a fully automatic transmission. The AACE is capable to speed up to 45 km/h on land. It can travel safely in river streams against current speeds up to 1.5 m/sec with 360° highmanoeuvrability through its two water jets, placed at the rear section on both sides of the vehicle.

Today the AACE is used by Turkish Land Forces in various missions and is a combat proven system following its use in various operations.







OTTER Technical Specifications

GENERAL	
Vehicle Classification	MLC 36
Weight	36,000 kg Load Per Axle 9,000 kg
Crew	3
Length	13 m
Width	3.5 m
Height	3,95 m
Ground Clearance	0 to 0.65 m (Adjustable)
2 Bay Ferry Payload (Max. Single Load)	MLC 85 T
3 Bay Ferry Payload (Max. Single Load)	MLC 120 W
Bridge Payload (Max. Single Load)	MLC 85 T MLC 120 W
100 m Bridge Assembly Time	± 10 minutes

Data subject to change without notice.

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 7 Forward, 1 Reverse
Max. Road Speed	76 km/h
Max. Water Speed	10 km/h (with 2 Pump Jets)
Range	> 600 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.5 m
Trench Crossing	2 m
Turning Radius	10.25 m (Inner)
Suspension System	Independent, Double Wishbone, Air Suspension with Ride Height Control
Number of Axles	4
Driven Axles	All Wheel Drive
Steered Axles	1, 2, 3, 4
Service Brakes	Hydraulic with ABS at Each Wheel
Parking Brakes	Integral to Driveline, Spring Activated, Hydraulically Released

PROTECTION & LIFE SUPPORT SYSTEMS	
Ballistic Protection	Crew Cabin Only (STANAG 4569 Level Classified)
CBRN Protection System	Standard
A/C and Heater	Standard
MISSION EQUIPMENT	
Electrical System -	Batteries 2 x 12 V, 120 Ah (C20)
	Alternators Brushless, Self Excite 2x140 A





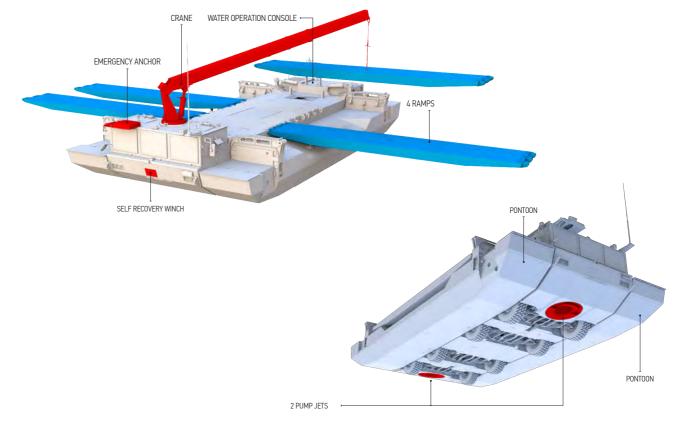
RAPID DEPLOYABLE AMPHIBIOUS WET GAP CROSSING SYSTEM



The OTTER is a bridge and ferry system designed for safe and fast transport of combat and logistic military vehicles in river crossing operations.

The OTTER system can also be used in natural disasters such as floods.

Being the only 8x8 vehicle in its class in the market today, the OTTER has unprecedented redundancy, operational capability in soft soil, cross-country mobility and amphibious performance.



Exceptional road and off-road performance: its all-wheel 8x8 driveline, central tire inflation and adjustable ride height control features provide an incomparable off-road driving performance and speed especially on loose, muddy and rough terrains. The ability to operate in soft soils allows for significantly less preparation on riverbanks to enter and exit the water. The all-wheel-steering feature minimizes the vehicle's turning radius. The vertical obstacle and trench crossing capabilities are also superior due to the shorter distance between axles in the 8x8 concept. Moreover, the 8x8 configuration gives a maximum axle load of around 9 tons, the significantly low ground pressure providing longer wheel life due to less wear. The OTTER can cope with 60% gradient and 30% side slopes.

360° manoeuvres in high river currents: the OTTER system has two water pump jets that provide advanced water operation capabilities enabling the vehicle to carry out 360° manoeuvres within high river currents such as pivot turns and side moves. During water operations the axles are retracted in order to decrease the water drag.

In the ferry role, a single OTTER system can transport MLC 21 tracked vehicles. Two OTTER systems can be coupled together forming a pontoon that can transport an MLC 85 T vehicle. By coupling three systems ramp to ramp, up to MLC 120 W vehicles can be transported over wet gaps. As well as its role as a ferry, 8 OTTER systems can be combined together ramp to ramp to form a 100 m long bridge capable of carrying MLC 85 T and MLC 120 W vehicles. For specific missions, numerous OTTERs can be coupled together to cross wider distances.



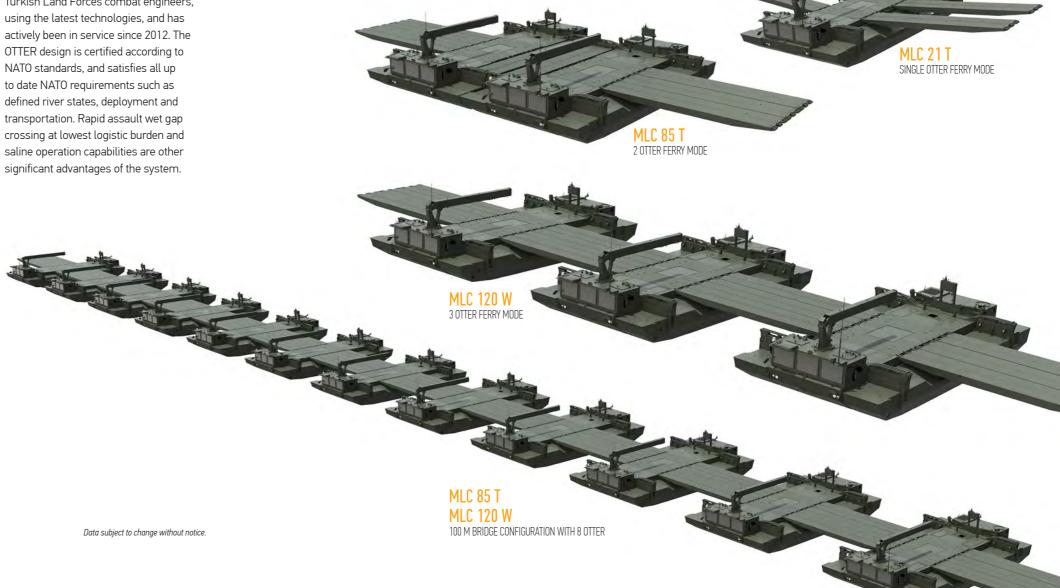
In terms of self-sufficiency, the OTTER can carry four ramps on a single system, which eliminates the need for additional logistic vehicles. The OTTER is also fitted with a self-recovery winch, which recovers the vehicle or any other system especially in soft terrains.

Another unique feature of the OTTER is its crew survivability. The crew cabin that accommodates 3 personnel features ballistic armour protection, automatic fire suppression and NBC protection systems. The vehicle is fitted with a distributed vetronics architecture, which includes an on board diagnostics system (CAN-BUS structure). Front and rear cameras enhance situational awareness. The vehicle is also equipped with a standard anchoring mechanism (both emergency and land anchoring systems).

In case of failure or damage, the OTTER's 8x8 driveline concept serves by far the best for redundancy requirements. In case of loss of several driveline items (wheels, brakes, axles etc.), the vehicle does not lose operational capability whereas 4x4 vehicles do.

The OTTER is an operationally proven bridge and ferry system designed for Turkish Land Forces combat engineers, using the latest technologies, and has actively been in service since 2012. The OTTER design is certified according to NATO standards, and satisfies all up to date NATO requirements such as defined river states, deployment and transportation. Rapid assault wet gap crossing at lowest logistic burden and saline operation capabilities are other





RAPID DEPLOYABLE AMPHIBIOUS WET GAP CROSSING SYSTEM

OTTER







KAPLAN HYBRID Technical Specifications

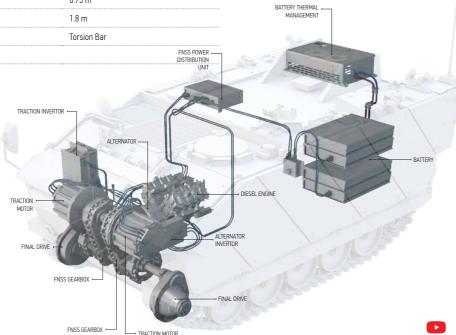
THE ENTERING TECHNICAL OPECINICACIONS	
GENERAL	
Power-to-weight Ratio	22-35 Hp/ton (continuous - peak)
Crew	5 (Commander, Driver, Gunner, Assistant Gunner and Additional Personnel)
Length	5.6 m
Width	3 m
Height Overall	2.4 m
Combat Loaded Weight	17.500 kg
Operating Temperature Range	-32°C / +49°C

MOBILITY	
Electric Motors	PMSM Motors x 2 (397 HP continuous - 617 HP peak)
Generator Engine	400HP Diesel
Transmission	Two Speed Gearbox
Max. Road Speed	> 65 km/h
0-32 km/s Acceleration	< 6 Seconds
Range	> 525 km
Gradient	70%
Side Slope	40%
Vertical Obstacle	0.75 m
Trench Crossing	1.8 m
Suspension System	Torsion Bar
	FNSS POWER

Data subject to change without notice

	Data Subject to change without notice
HYBRID POWERTRAIN CAPABILITIES	
Battery Capacity	800V 56 kWh Lithium Ion Battery
Silent Operation Mode	20km, with Constant Speed of 10km/s
External Electrical Power Output	220-380 V, up to 200kW
Service Brake System	Hydraulic Activated Disc Brake
	Regenerative Braking System
Parking Brake System	with Mechanical Activations
Silent Survaillance Mode	48 hours
Silent Survaillance Mode (with A/C on)	14 hours
Power Output for Mission Equipment	28V 1,5kW

ARMAMENT Manned and Remote Controlled Turrets, New Generation Laser Turrets Powered by High Voltage, Mortar and/or Missile Systems from Various Types and Origin Can be Integrated



KAPI AN HYBRID

HYBRID POWERPACK SOLUTIONS



The KAPLAN Hybrid Vehicle offers extreme off-road performance of a tracked vehicle with the addition of silent drive, extended silent watch, enhanced fuel economy, and increased exportable power that enables it to be used in combat and reconnaissance scenarios thanks to the new hybrid diesel-electric tracked vehicle powertrain system developed by FNSS.

Hybrid powertrain integrated platform impressively demonstrates the company's know-how in the fields of hybrid drive technology, software development and electronic control. These features include but not limited to, high mobility, silent operation, fuel efficiency, high electric power supply to the field, operation flexibility, ease of maintenance and design flexibility for mobility sub-systems.

Thanks to the high torque output of the electric motors at low speeds, new hybrid powertrain provides superior acceleration to KAPLAN Hybrid Vehicle in comparison to other tracked platforms. This brings critical advantage in battlefield by quick response to the threats and evacuation of the field.

Another advantage of the hybrid powertrain is the silent operation of the vehicle. Serial hybrid configuration, in electric only mode all powered by batteries, allows almost silent driving or operation of the on-board systems for reconnaissance and communication with

no internal combustion engine operation. This silent operation feature will drastically reduce the amount of acoustic and thermal signature of the vehicle and make it harder to detect the vehicle.

Electric traction system of the new hybrid powertrain has an efficiency value more than 95%. This feature reduces heat and noise emission to the environment and together with the fuel efficient diesel generator set and battery pack, they provide an extended cruising range to the

The energy recuperation feature of the electric motors, while braking, kinetic energy of the vehicle is recovered. In other platforms, the energy is lost as heat through brakes to the environment while KAPLAN Hybrid Vehicle recharges the battery pack utilizing the recovered energy. As a result of these features, burden of liquid fuel logistics to the field can be reduced.

Generator of the new hybrid tracked vehicle powertrain enable platform to operate using only diesel fuel without requiring a charging infrastructure. Generator provides electric power to the traction motors while cruising. When the vehicle is stationary, this time, generator can export power source to a commander post or other units on the field. High energy generation capability of the generator also enables onboard integration of focused energy weapons, anti-drone systems and other high power mission equipments.

Energy generation, energy storage and silent operation features of the hybrid powertrain brings operational flexibility to Kaplan Hybrid Vehicle on the field. Integration of new high power mission systems and high tech weapon systems is enabled to increase lethality. Longer stationary operation and scouting without being detected is possible due to energy storage and silent operation features.

Hybrid vehicle design architecture also brings flexibility to internal layout for better response to the mission profile requirements. Shafts and other mechanic powertrain and steering parts are replaced with cables, which enables different layout options and enhances maintainability. The use of a complex cross drive transmission is avoided, instead the vehicle is driven by electric motors and simplified e-drive gearboxes.

The new hybrid tracked vehicle powertrain system is applicable to vehicles up to 20 tonnes GVW. Depending on customer requirements, it can be adapted to new tracked vehicle production programs as well as modernisation programs. 40 tonnes version of the hybrid powertrain is under development.

Hybrid KAPLAN vehicle, with the new hybrid powertrain, opens up a new era on military vehicles for future requirements of military operations around the world.

UNMANNED GROUND VEHICLES





63

ARMAMENT

Waypoint Navigation and Patrol Capabilities

Obstacle Detection and Avoidance Capabilities

Leader-Follower Capabilities in GNSS Denied Areas

SHADOW RIDER Technical Specifications

GENERAL	
Combat Weight	13,500 kg
Length	< 5.5 m
Width	< 3 m
Height Hull Roof	< 2 m
Air Transportation	A400M, C-130H

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 4 Forward, 1 Reverse
Max. Road Speed	> 50 km/h
Range	> 450 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.6 m
Trench Crossing	1.6 m



Data subject to change without notice.

Туре	Remote Controlled Turrets and Missile Systems from Various Types and Origin Can be Integrated
AUTONOMY AND REMOTE CONT	TROL FEATURES
RF and LTE Communication	



SHADOW RIDER

HIGH MOBILITY, EFFECTIVE FIRE POWER, READY FOR MULTIOPERATIONAL MISSIONS



The SHADOW RIDER is a family of modular autonomous unmanned ground vehicles designed to meet the multi-operational needs of the modern battlefield and to support soldiers in complex and challenging terrains.

The SHADOW RIDER FoV, is a system solution that will reduce the soldier's burden on the battlefield and become a force multiplier for the user in full spectrum missions thanks to its artificial intelligence supported autonomy kit, decision support systems, sensor suit, positional and situational awareness systems.

The SHADOW RIDER FoV is equipped with the autonomy kit developed by FNSS which has autonomous driving modes such as patrol, track and return to military base, as well as various layers of protection for a safe ride. The FNSS autonomy kit features an open architecture design to enable rapid adaptation of technological developments.

In the armed variant of the SHADOW RIDER designed for fire support missions, the "man" is always in the loop in the decision-making process, and the fire decision is not made by the system.

The SHADOW RIDER, which can be commanded remotely and has autonomous mobility, is an unmanned ground vehicle family that can meet all kinds of missions such as reconnaissance and surveillance, logistic support, tactical deception, fortified positions reconnaissance, communication relay, medical evacuation and most of all fire support, its design allowing integrating payloads suitable for those different tasks.

The Shadow Rider FoV integrates remote control and autonomous capabilities on a reliable M113 platform. The SHADOW RIDER provides optional manned use and has a payload capacity of 4,500 kg.

SHADOW RIDER Key Features

- Autonomous control and architecture according to military standards
- Effective wireless connection
- Modular design suitable for multitasking
- Open architecture with growth
- 360° detection system
- High firepower

Versatile Platform

- Command Vehicle
- Fire Support Vehicle
- Tactical Decoy Vehicle
- Engineering Reconnaissance Vehicle
- Logistics Support Vehicle







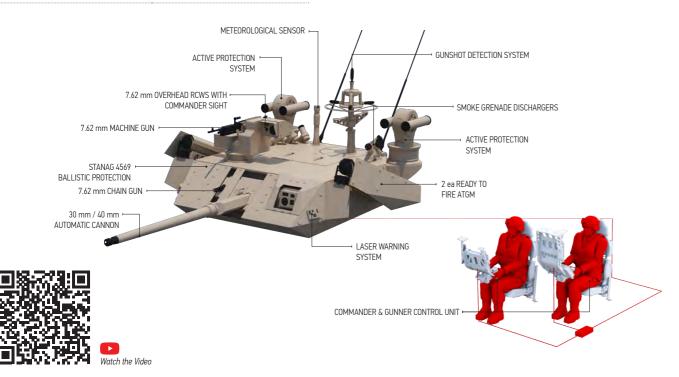


TEBER-II 30/40 Technical Specifications

GENERAL TEBER-II 30/40 Remote Controlled Turret Turret Type 30mm/40mm Chain Gun, Dual Feed Automatic Cannon (can be replaced with Main Armament a 30 or 40mm barrel, without making any changes to the gun mount and other parts) 200 (30 mm x 173 or 40 mm x 180) Number of Ready to Fire Rounds 7.62 mm MG or 7.62 mm Chain Gun Secondary Armament (Coaxial) Number of Ready to Fire Rounds 600 (7.62 mm) 2 ea ready to fire ATGM (various types of Anti-Tank Guided Missile modern anti-armour systems selected by Traverse 360° Continuous Elevation -10° to +45° Max Rotation Speed > 60°/sec Traverse & Elevation Max Acceleration > 1.5 rad/s² (Tra/El) N 3 mil/sec Tracking Rate Stabilisation Electric Drive with Two-Axis Overhead Remote Controlled Weapon Station with Commander Sight 7.62 mm or 5.56 mm MG Armament Number of Ready to Fire Rounds 800 (5.56mm), 500 (7.62mm) Traverse 360° Continuous Elevation -50° to +85°

Data subject to change without notice

SIGHT & FIRE CONTROL SYSTEM	
Thermal Imager	
Daylight Camera	
Laser Range Finder	
Automatic Target Tracking	Optional
Fire Control Computer	Automatic Super-Elevation & Lead Angle Correction
WEIGHT & DIMENSIONS	
Turret Weight	<3,000 kg
Ring Gear Diameter	1,600 mm
Swing Radius	3,420 mm
Width	2.95 m
Height	0.7 m
PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	Optional



TEBER-II 30/40 RCT

REMOTE CONTROLLED TURRET



TEBER-II 30/40 Remote-Controlled Turret (RCT) is designed to be fitted on wheeled or tracked armoured vehicle platforms. It can be equipped with a medium calibre automatic cannon, an advanced target detection and a hunter-killer fire control system.

The TEBER-30/40 RCT incorporates the latest technologies in motion control, fire control, protection, and lethality. It can operate day and night under all weather conditions and battle environments thanks to its integrated sensors and other electronic systems. Both the gunner and the commander are able to control all functions of the turret. The commander is authorized to take control of the turret overrunning the gunner when needed.

The gun turret drive system is electrical type, with two-axis stabilisation ensuring high accuracy even when firing on the move. The turret can rotate seamlessly on the 360°, the elevation arc being from -10° to +45, angular speed being over 60°/second.

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.

Its 30mm dual feed automatic 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. The turret can hold 200 ready-to-fire rounds (30mm or 40mm) and dual-feed automatic cannon has a maximum cyclic rate of fire of 200 rounds/minute. Two different types of ammunition can be loaded in the double-compartment ammunition box ensure that targets of various types can be neutralised in the most effective way. Different types of ammunitions can be used in the main armament such as high explosive, anti-tank or programmable airburst ammunition.

The coaxial MG consists of an electrically operated 7.62 mm chain gun or a gas operated 7.62 mm machine gun. The major advantages of the electrically operated chain gun are that a misfired round can be extracted by the electrical drive and the gun can continue firing without any crew served action, and that the highly toxic propellant gas that occurs after firing is significantly reduced compared to conventional gas operated machine guns.

In order to have an effective target acquisition and identification capability on the battlefield, the turret is equipped with electro-optic sights that can rotate independently from the turret and have two-axis independent stabilisation for the commander and the gunner. A high elevation and depression Overhead Remote Controlled Weapon Station (ORCWS) acts as the commander's panoramic sight that can rotate 360° continuously on the traverse axis while enables engaging targets independent form the turret's position with 7.62 mm or 5.56 mm weapon equipped. 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. Sight systems include a long- or midwave thermal imager, wide and narrow angle day sensors and a laser range finder. Both the turret and ORCWS is designed to engage multiple targets simultaneously from all directions.

The TEBER-30 RCT has an advanced fire control system. Automatic target tracking capability, supporting systems for the gunner, automatically calculated elevation, and lead angles for stationary and moving targets provide a high first-round hit probability combined with more effective ammunition utilization. The fire control system also has hunter-killer capability. Thus, the commander acquires the targets with his own independent panoramic sight and automatically sends the acquired target information to the gunner and while the gunner engages the target the commander keeps searching for other targets.

Thanks to the independent power source integrated in the turret and to the userconfigurable smart power distribution system, the turret drive, gun firing and sighting systems can be used for a longer period powered by the turret battery, regardless of the vehicle battery status. A bank of four 76 mm smoke grenade launchers is mounted on both sides of the turret towards the front. These can be replaced by other calibre grenade launchers according to the to customers' requirements.

The TEBER-30 RCT provides multi-level ballistic protection thanks to its modular armour structure which can be increased according to user requirements.

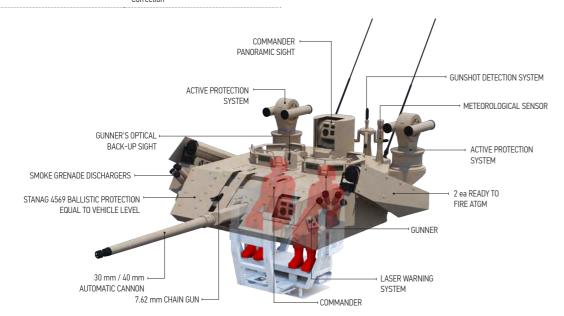
TEBER-30 Technical Specifications

GENERAL	
Turret Type	Two Person Turret
Main Armament	30 mm Mk44 (Dual Feed)
Number of Ready to Fire Rounds	300
Secondary Armament (Coaxial)	7.62 mm Mk52 CG or 7.62 mm MG
Traverse	360° Continuous
Elevation	-10° to +45°
Max Rotation Speed	> 60°/sec Traverse & Elevation
Max Acceleration	> 1.5 rad/s² (Tra/El)
Tracking Rate	0.3 mil/sec
Stabilisation	Electric Drive with Two-Axis

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SIGHT & FIRE CONTROL SYSTEM	
Thermal Imager	
Daylight Camera	
Laser Range Finder	
Automatic Target Tracking	Optional
Fire Control Computer	Automatic Super-Elevation & Lead Angle

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WEIGHT & DIMENSIONS	
Turret Weight	<3,850 kg
Ring Gear Diameter	1,600 mm
Swing Radius	3,420 mm
Width	2.28 m
Height	0.7 m
PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	Optional



TEBER-30

MEDIUM CALIBER TWO-MAN TURRET

OVERVIEW

The TEBER-30 Two-Man Turret, is a medium caliber turret that can be fitted to wheeled and tracked armoured vehicles and is offered in two configurations. In the conventional two-man configuration, the commander and the gunner are positioned in the turret basket.

Although the turret basket occupies a considerable amount of space inside the vehicle, the manned configuration provides significant advantages to the vehicle commander in terms of situational awareness, fire control efficiency and effective control of the battlefield. Communication between the gunner and the commander is more effective and accurate.

The TEBER-30 Two-Man Turret incorporates the latest technologies in turret drives, fire control, protection, and lethality. It can operate day and night under all weather conditions and battle environments thanks to its integrated sensors and other electronic systems. Both the gunner and the commander are able to control all functions of the turret. Additionally, thanks to the manual backup system, the gunner can steer the turret in traverse and elevation and engage the targets.

The main armament consists of the Mk44 30 mm dual-feed automatic cannon with 300 ready-to-fire rounds and has a maximum rate of fire of 200 rounds/minute. Two types of ammunition can be loaded in the doublechambered ammunition box of the turret feed and ensure the neutralization of various kinds of targets. Different types of ammunition can be used in the main armament, primarily high explosive,

anti-armour or programmable airburst ammunition. In particular, programmable ammunition ensure that detected targets can be engaged in the most effective way. The 30 mm automatic cannon and coaxial machine gun provide the ability to effectively engage a wide spectrum of

SuperShot 40 mm (40x180 mm) ammunition can also be used in the turret as the 30 mm cannon can be easily converted by a simple replacement on the field to fire those 40 mm rounds.

TEBER-30 Two-Man Turret can optionally adapted with various modern antiarmour systems (ATGM's) such as Semi-automatic command to line of sight (SACLOS) and Automatic command to line of sight (ACLOS) guided missile types, if required by the user.

The coaxial weapon consists of a Mk52 chain gun or a 7.62 mm machine gun with 1,000 ready-to-fire rounds. The major advantages of the 7.62 mm electric drive chain gun are that misfire stoppages are eliminated by the electrical extraction of the unspent cartridge, and that it considerably reduces highly toxic propellant gases.

A bank of four 76 mm grenade launchers is mounted on both sides of the turret towards the front. These can be replaced by grenade launchers of other calibres according to customers' requirements.

The gun turret drive system is electrical, with two-axis stabilisation ensuring high accuracy even when firing on the move. The turret can rotate seamlessly on the 360°, the elevation arc being from -10° to +45*, angular speed being over 60°/ second.

The TEBER-30 Two-Man Turret has an advanced fire control capability thanks to its on-board fire control computer and the two-axis stabilised independent sighting system. It can generate a kinematic lead solution to increase the first-round-hit probability for stationary/ moving targets, which also ensures a more effective ammunition use.

The dual-axis stabilised sight system includes a long-wave or mid-wave thermal imager, a day camera with wide and narrow field of view angles and a laser range finder. The sight is also fitted with an automatic tracking system.

On top of the TEBER-30 Two-Man Turret we also find a two-axis stabilised 360° commander's panoramic sight with thermal imager, day camera and laser range finder enabling hunter-killer capability.

Thanks to the independent power source integrated in the turret and to the user-configurable intelligent power distribution system, the turret drive, gun firing, and sighting systems can be electronically used for a longer time while in emergencies, regardless of the vehicle battery status. The TEBER-30 Two-Man Turret shell is made of all-welded aluminium armour with add-on composite and steel armour providing ballistic protection up to user requirement.





TEBER-30/35 RCT Technical Specifications

GENERAL	
Turret Type	Remote Controlled Turret
Main Armament	30 mm/40 mm Mk44 or 35 mm/50 mm Bushmaster III
Number of Ready to Fire Rounds	30 mm - 200
	35 mm - 100
Secondary Armament (Coaxial)	7.62 mm MG or 7.62 mm Bushmaster CG
Traverse	360° Continuous, Electrical
Elevation	-10° to +45°, Electrical Actuation
Max Rotation Speed	> 1 rad/s (Tra/El)
Stabilisation	Electric Drive with Two-Axis Stabilisation

SIGHT & FIRE CONTROL SYSTEM
Thermal Imager
Daylight Camera
Laser Range Finder
Independent Sight Unit
Automatic Target Tracking
Electronic Image Stabilisation
Moving Target Indication
Electronic Zoom
Manual Firing
Automatic Ballistic Computing
Low Ammunition Warning System
Deck-clearance Algorithms for No-Fire Zones and No-Motion Zones
Double Handle

Data subject to change without notice.

WEIGHT & DIMENSIONS	
Turret Weight	< 3,000 kg
Ring Gear Diameter	1,700 mm
Swing Radius	3,970 mm
Width	2.59 m
Height	0.93 m
Length	2.64 m
PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	Optional



ITEBER-30/35 RCT

REMOTE CONTROLLED TURRET

OVERVIEW



The TEBER-30/35 RCT is a remote controlled turret designed to be installed on wheeled and tracked armoured vehicles and equipped with a medium calibre automatic cannon, an advanced target detection and a fire control system. Unlike conventional turrets, remote controlled turrets do not have any basket structure and thus the extra available interior space provides a significant advantage to the user.

The TEBER-30/35 RCT incorporates the latest technologies in turret drives, fire control, protection, and lethality. It can operate day and night under all weather conditions and battle environments thanks to its integrated sensors and other electronic systems. Both the gunner and the commander are able to control all functions of the turret. The commander is authorized to take control of the turret overrunning the gunner when needed.

The gun turret drive system is electrical, with two-axis stabilisation ensuring high accuracy even when firing on the move. The turret can rotate seamlessly on the 360°, the elevation arc being from -10° to +45*, angular speed being over 60°/ second.

The TEBER-30/35 RCT is equipped with the Mk44 30 mm/40 mm dual-feed automatic cannon with 200 ready-tofire rounds and has a maximum cyclic rate of fire 200 rounds/minute. The TEBER-30/35 RCT can also be equipped

with the 35 mm/50 mm Bushmaster III dual-feed automatic cannon if required by the user. Two different types of ammunition loaded in the doublecompartment ammunition box ensure that targets of various types can be neutralised in the most effective way. Different types of ammunition can be used in the main armament such as high explosive, anti-tank or programmable airburst ammunition.

The coaxial MG consists of an electrically operated 7.62 mm chain gun or a gas operated 7.62 mm machine gun. The major advantages of the electrically operated chain gun are that a misfired round can be extracted by the electrical drive and the gun can continue firing without any crew served action, and that the highly toxic propellant gas that occurs after firing is significantly reduced compared to conventional gas operated machine guns.

In order to have an effective target acquisition and identification capability on the battlefield, the turret is equipped with electro-optic sights that can rotate independently from the turret and have two-axis independent stabilisation for the commander and the gunner. The commander's panoramic sight can rotate 360° continuously on the traverse axis. Sight systems include a long- or midwave thermal imager, wide and narrow angle day sensors and a laser range finder.

The TEBER-30/35 RCT has an advanced fire control system. Automatic target tracking capability, supporting systems for the gunner, automatically calculated elevation, and lead angles for stationary and moving targets provide a high first-round hit probability combined with more effective ammunition utilization. The fire control system also has hunter-killer capability. Thus, the commander acquires the targets with his own independent panoramic sight and automatically sends the acquired target information to the gunner and while the gunner engages the target the commander keeps searching for other targets.

Thanks to the independent power source integrated in the turret and to the userconfigurable smart power distribution system, the turret drive, gun firing and sighting systems can be used for a longer period powered by the turret battery, regardless of the vehicle battery

A bank of four 76 mm grenade launchers is mounted on both sides of the turret towards the front. These can be replaced by other calibre grenade launchers according to the to customers' requirements.

The TEBER-30/35 RCT provides multi-level ballistic protection thanks to its modular armour structure which can be increased according to user requirements.



SABER Technical Specifications

GENERAL	
Turret Type	One Person Turret
Main Armament (Primary armament is based on user	25 mm M242 Enhanced (Dual Feed Automatic) or
requirements and the turret can be	40 mm AGL or
configured with three options)	12.7 mm MG
	25 mm 150 HE/90 AP-Total 240 Ready Rounds
Number of Ready to Fire Rounds	40 mm - 96
	12.7 mm - 400
Secondary Armament (Coaxial)	7.62 mm MG
Traverse	360° Continuous with Manual Back-up
Elevation	-8° to +48° with Manual Back-up
Max Rotation Speed	> 60°/sec Traverse & Elevation
Tracking Rate	0,3 mil/sec
Stabilisation	Electric Drive with Two-Axis Stabilisation

Data subject to change without notice.

SIGHT & FIRE CONTROL SYSTEM	
Thermal Imager	Standard, 8-12 µm or 3-5 µm
Direct View Optics	
Daylight Camera	
Laser Range Finder	Standard, 8,000 m Range
Automatic Target Tracking	Optional
Automatic Ballistic Computing	Automatic Super and Lead-Angle Elevation Computation
WEIGHT & DIMENSIONS	
Turret Weight	1,800 kg (Combat Weight with SABER-25 Configuration)
Ring Gear Diameter	1,000 mm
Swing Radius	2,600 mm
Width	1.6 m
Height	0.61 m (Above Mounting Surface)
-	-



PROTECTION



STANAG 4569 (Level Classified)



SABER

ONE-MAN MEDIUM CALIBER TURRET FOR INFANTRY FIGHTING VEHICLES



The SABER is a medium calibre one-man, power operated turret that can be fitted on wheeled and tracked armoured vehicles.

The SABER turret is equipped with the latest technologies in turret drives, fire control, protection and lethality. Its compact dimensions and light weight make the SABER a suitable choice for different types of armoured vehicles.

The turret can be configured with three types of main armament based on user requirements: M242 25 mm dual-feed automatic cannon, 40 mm automatic grenade launcher (AGL) or a 12.7 mm machine gun. A 7.62 mm coaxial machine gun is also available with all these configurations.

The digital fire control and sighting system includes a 3rd Generation Long Wave or Mid Wave Thermal Imager, a telescopic day optical channel, an eye safe Laser Range Finder and a ballistic computation capability.

The gun turret drive system is electrical and fully digital with two-axis stabilisation capability ensuring high accuracy even when firing on the move.







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SABER RCT Technical Specifications

GENERAL	
Turret Type	Remote Controlled Turret
Main Armament	25 mm M242 Bushmaster CG
Number of Ready to Fire Rounds	180
Secondary Armament (Coaxial)	7.62 mm MG
Traverse	360° Continuous, Electrical Actuation
Elevation	-8° to +48°, Electrical Actuation
Max Rotation Speed	> 1 rad/s (Tra/El)
Stabilisation	Electric Drive with Two-Axis Stabilisation

SIGHT & FIRE CONTROL SYSTEM
Thermal Imager
Daylight Camera
Laser Range Finder
Automatic Target Tracking
Electronic Image Stabilisation
Moving Target Indication
Picture in Picture (8x Electronic Zoom in a Separate Window)
Manual Firing
Automatic Ballistic Computing
Low Ammunition Warning system
Deck-clearance Algorithms for No-Fire Zones and No-Motion Zones
Double Handle

Data subject to change without notice.

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WEIGHT & DIMENSIONS	
Turret Weight	< 1,450 kg
Ring Gear Diameter	1,000 mm
Swing Radius	2,460 mm
Width	1.67 m
Height	0.68 m
PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8



SABER RCT

REMOTE CONTROLLED TURRET



The SABER RCT is designed to meet the requirements of Turkish Armed Forces and international customers. It is equipped with a 25 mm M242
Bushmaster chain gun and a coaxial 7.62
mm MG, providing exceptional firepower
and high hit performance.

The SABER RCT has been designed to be used on a wide range of armoured vehicles from 4x4 to 8x8 wheeled and tracked IFVs.

The turret is equipped with an electrooptic sight in order to have effective
target acquisition and identification
capability on the battlefield. It is also
equipped with two-axis independent
stabilisation system for fire on the move.
The sighting system includes a thermal
imager, day sensors and a laser range
finder. A commander's 360° panoramic
sight can also be integrated if requested
by the user.

The SABER RCT is equipped with an advanced fire control system. The automatic target tracking capability for stationary and moving targets ensures a high first-round-hit probability providing a more effective ammunition utilization of the 180 ready-to-fire rounds.







SANCAK RWS Technical Specifications

***	GENERAL	
	Turret Type	Remote Controlled
	Main Armament -	12.7 mm M2 Heavy MG or
		30 mm Automatic
		40 mm AGL or
		7.62 mm MG
	Traverse	360° Continuous, Electrical with manual back-up
	Elevation	-20° to +60°, Electrical with manual back-up
	Max Rotation Speed	> 1 rad/s (Tra/El)
***	Stabilisation	Flectric Drive with Two-Axis Stabilisation



Data subject to change without notice.

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SIGHT & FIRE CONTROL SYSTEM	
Thermal Imager	
Daylight Camera	
Laser Range Finder	
Automatic Target Tracking	
Electronic Image Stabilisation	
Moving Target Indication	
Picture in Picture (8x Electronic Zoom in a Separate	e Window)
Manual Firing	
Low Ammunition Warning system	
Deck-clearance Algorithms for No-Fire Zones and	No-Motion Zones
Double Handle	

Total Weight	488 kg	
Ring Gear Diameter	260 mm	
Swing Radius	1,310 mm	
Width	1.27 m	
Height	0.86 m	

STANAG 4569 (Level Classified)

All Around Ballistic Protection



The SANCAK (RWS), stands out in its class with distinctive technical specifications and ballistic protection.

An unmanned system, the SANCAK ensures personnel safety and considerably increases hit probability thanks to its fire control system. To ensure their availability during operations, especially in urban areas, RWS need to be fitted with ballistic protections; it has been demonstrated that turrets are often hit not only by enemy fire but also by debris and fragments scattered around during combat actions, which can cause damages and put the RWS out of order. Thanks to its ballistic protection, which level remains undisclosed, the SANCAK RWS is capable to carry out its mission with maximum reliability.

The SANCAK RWS can be equipped with an M2 12.7 mm/.50 calibre machine gun, a Mk19 40 mm automatic grenade launcher, an M240 or an FN MAG58 7.62 mm machine gun. It can be fitted to different types of platforms ranging from light vehicles to main battle tanks. The system is in service with a Middle East customer and with the Turkish Armed









CAKA RWS Technical Specifications

GENERAL	
Turret Type	Remote Controlled
Main Armament	Dual armament with 40 mm AGL and 12.7 mm M2 Heavy MG
Traverse	360° Continuous, Electrical
Elevation	-7° to +45°, Electrical
Max Rotation Speed	> 1 rad/s (Tra/El)
Stabilisation	Electric Drive with Two-Axis Stabilisation

SIGHT & FIRE CONTROL SYSTEM
Thermal Imager
Daylight Camera
Laser Range Finder
Automatic Target Tracking
Electronic Image Stabilisation
Moving Target Indication
Picture in Picture (8x Electronic Zoom in a Separate Window)
Manual Firing
Automatic Ballistic Computing
Low Ammunition Warning system
Deck-clearance Algorithms for No-Fire Zones and No-Motion Zones
Double Handle

Data subject to change without notice.

Turret Weight	< 700 kg
Ring Gear Diameter	780 mm
Swing Radius	1,960 mm
Width	1.40 m
Height	0.96 m
PROTECTION	









The CAKA RWS was purposely

designed for being installed on the MAV

amphibious assault vehicle. A number

of solutions were therefore adopted to

in order to ensure maximum reliability,

firepower to the marines while they hit the beach and when they subsequently

move inland. This makes it suitable not

only for being installed on amphibious vehicles but also on light naval vessels.

as it must provide the much needed

protect it against the effects of sea water,

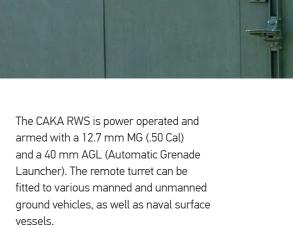








TRACKED ARMOURED



It incorporates the latest technologies in turret drives, fire control and protection.



TACTICAL VEHICLES

The CAKA RWS offers great

advantages thanks to its light

weight, ballistic protection, target

Being unmanned, it occupies less

internal volume inside the vehicle.

acquisition, reliability and accuracy.

CAKA RWS

OVERVIEW

SURFACE VESSELS

ARCT Technical Specifications

GENERAL	
Turret Type	Remote Controlled
Main Armament	KORNET-E, MIZRAK-O, SKIF and other missiles
Secondary Armament (Coaxial)	7.62 mm MG
Traverse	360° Continuous
Stabilisation	Electric Drive with Two-Axis Stabilisation

Data subject to change without notice.

SIGHT & FIRE CONTROL SYSTEM	
Gunner's Sight	Mid Wave or Long Wave Thermal Image Day Camera Laser Range Finder with 10,000 m Range
Fire Control Computer	Automatic Super-Elevation & Lead Angle Computation
WEIGHT & DIMENSIONS	
Total Weight	~600 kg
PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)







ANTI-TANK REMOTE CONTROLLED TURRET

ARCT



The ARCT was designed specifically for the anti-tank role from the very outset and has some important integrated features that turrets with add-on missile capability are lacking. The ARCT offers the best optimization for low silhouette, armour protection, ergonomics, easy conversion to tripod launch configuration and sighting system.

The ARCT can be equipped with either KORNET-E or OMTAS ATGM missiles. With the two missile systems requiring very different integration approaches, the ARCT is able to meet this challenging requirement through a modular design that relies on a common base structure and modular subsystems for each type of missile. Owing to its design, the ARCT is ready from the very outset for integration with different missiles, which grants the users substantial flexibility.

Unlike conventional manned turrets, the ARCT lacks a basket structure and is installed above the vehicle's roof. This increases the vehicle's internal useable volume, while the ARCT's low silhouette and weight enable its integration onto different types of armoured vehicles.

Capable of performing continuous 360 degrees traverse, the ARCT is armed with two anti-tank guided missiles along with a 7.62 mm coaxial machine gun. By means of its digital fire control system, the turret can automatically perform all the necessary ballistic calculations for achieving the highest hit probability, with both the missiles and coaxial machine gun. The gunner's sight system includes a new generation thermal camera, day camera, laser rangefinder and missile guidance electronics ensuring a highly effective use of the turret in day, night and under all weather conditions. In its very first firing test, the ARCT demonstrated its ability to score direct hits on targets even at the maximum range of its missiles. The platform's secondary armament serves to enhance the turret's firepower, and expands its mission range. Functions such as charging, firing, electrical extraction of empty MG cartridges can be carried out automatically from inside the vehicle. The turret is equipped with a digital electric gun turret drive system, and a two-axis stabilisation system to increase accuracy when firing on the move.

Survivability has been one of the primary focus areas of the design and the integrated armour solution provides the best protection with the lightest weight through the use of advanced armour materials. The gunner, using his control console inside the vehicle, can carry out surveillance; target detection, identification and missile lock-on and guidance functions, all the while remaining under ballistic protection. In the event of an emergency, mission batteries and the smart power distribution system inside the turret enable the use of the turret's drive system, firing functions and electrooptical systems independently of the vehicle's battery status, for increased mission endurance.

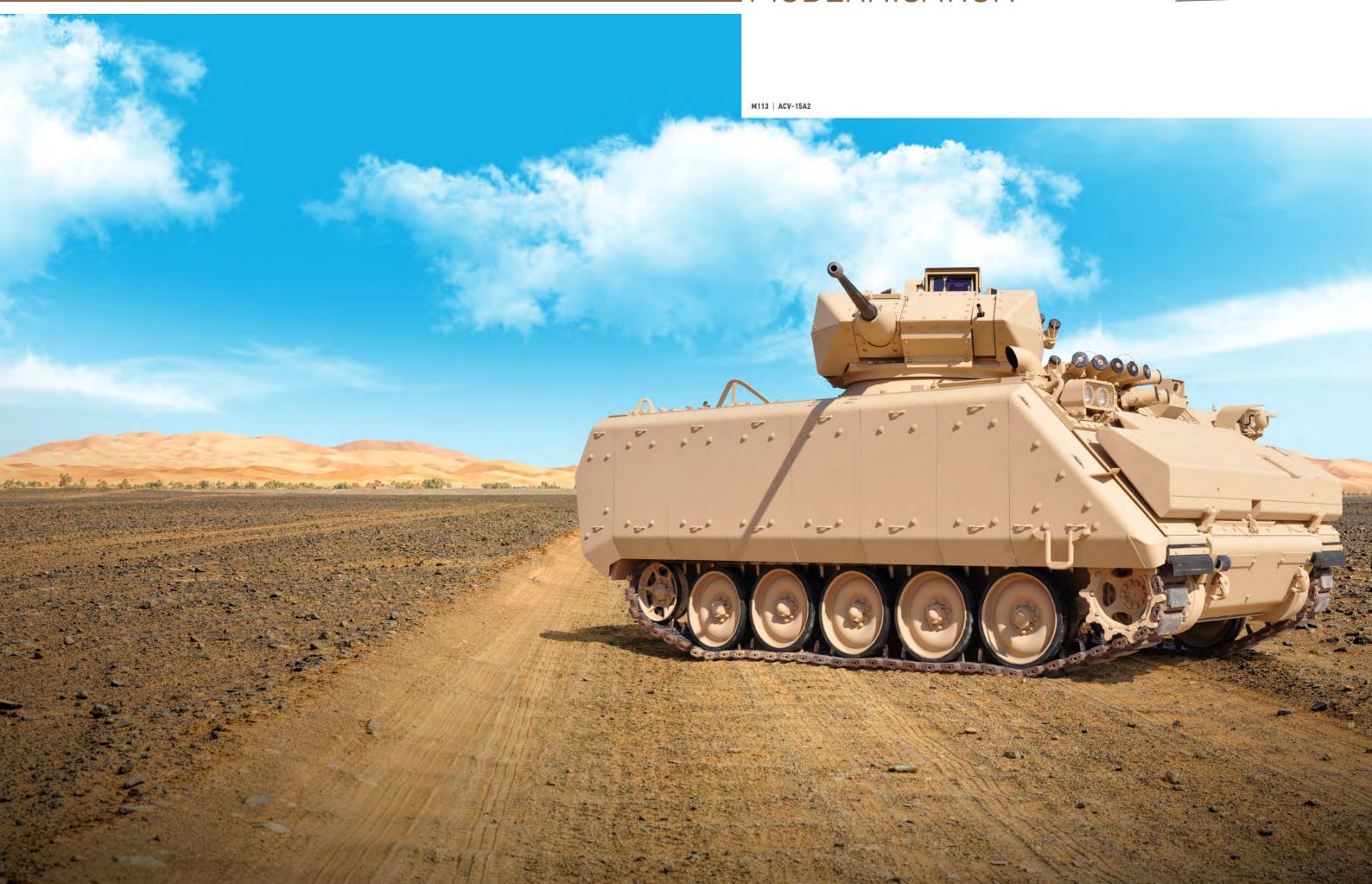






MODERNISATION





M113 FoV Technical Specifications

GENERAL	IERAL	
Weight	13,500 kg	
Crew	13 (Incl. Gunner, Driver and Commander)	
Length	5.30 m	
Width	2.79 m	
Height Hull Roof	1.85 m	
Height Overall	2.56 m	

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	65 km/h
Range	400 km
Gradient	60%
Side Slope	30%
Vertical Obstacle	0.61 m
Trench Crossing	1.68 m
Amphibious Capability	Standard
Max. Water Speed	5.8 km/h (with Track Propulsion)
Suspension System	Torsion Bar
Steering System	Through Transmission

Data subject to change without notice.

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Ballistic Protection	STANAG 4569 (Level Classified)
Mine Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8
Automatic Fire Suppression System	Standard
CBRN Protection System	Face Mask/Positive Pressure Type
A/C and Heater	Standard
ARMAMENT	
Type	Manned and Remote Controlled Turrets and Missile Systems from Various Types and Origin Can be Integrated
MISSION EQUIPMENT	
Driver Vision System	Thermal Cam. & Display

24 V

PROTECTION & LIFE SUPPORT SYSTEMS

Electrical System



M113 FoV

CAPABILITY ENHANCEMENT & LIFE EXTENSION PROGRAM

OVERVIEW



The sustainability solutions cover the entire M113 Family of Vehicles (FoV) for mobility upgrades, regardless of their specific mission equipment. Therefore, all M113 variants can be supported in terms of logistics and spare parts.

The FNSS M113A4 solution fully meets the requirements for a modern reliable M113 FoV.

The M113A4 & ACV configuration is based on common subsystems that are in service with Land Forces of Turkey, Middle East and South-East Asia regions.

The M113A4 is NATO certified and qualified by the original M113 manufacturer. This configuration significantly improves ease of operation, safety, reliability, performance and durability over the M113A1, A2, YPR & AIFV vehicles.

The M113A4 delivers significant improvements on mobility and survivability compared to the older M113 FoV and consists of modern diesel engine and automatic transmission. Reliability and durability have been greatly improved with the installation of the FNSS-developed ACV power pack.

This improvement in reliability and durability ensures that during operational deployment, the downtime for the vehicles is minimum, enabling the valuable maintenance personnel to focus on other tasks. This also guarantees maximum time for operational deployment by the user. This next generation modernized M113A4 FoV provides the user with a reliable and simple to operate vehicle with a service life of over 20 years.

The solution closely matches the ACV vehicles that have been tested several times between -20°C to +60°C in many different weather conditions on all terrains. In addition, the M113A4 has undergone a full desert mobility testing that was successfully completed covering over 3,000 km.



M113A4 IFV

The M113A4 IFV is the converted next generation modernized version of the M113A1 and A2 Infantry Fighting Vehicle. It is fitted with a 25 mm SABER Turret and has a capacity of carrying 9 personnel including the driver and the commander/gunner.



M113A4 SPM120

The M113A4 120 mm Armoured Mortar Vehicle is the next generation modernized version of the M113 Mortar Carrier vehicle. It is armed with a 120 mm rifled or smooth bore automated mortar mounted inside the vehicle, which fires through a hydraulic-operated mortar hatch placed on the hull top. It carries 4 personnel including driver, commander and 2 mortar crew.



M113A4 ICV

The M113A4 ICV is the next generation modernized version of the M113A1 and A2 Infantry Carrier Vehicle. The vehicle is armed with a 12.7 mm MG and 8 smoke grenade dischargers and carries 13 personnel including the driver and the commander/gunner.



The M113A4 Recovery Vehicle is the next generation modernized version of the M806 vehicle. It is fitted with a hydraulic crane mounted on the vehicle's top plate and a hydraulic recovery winch with a fairlead assembly mounted inside the vehicle, which facilitates the recovery and towing of both armoured and non-armoured vehicles in difficult terrain. It is armed with a self-defence 12.7 mm MG and carries 3 personnel including driver, gunner and technician.

VARIANTS

M113 FoV



M577A4 COMMAND POST VEHICLE

The M577A4 Command Post Vehicle is the next generation modernized version of the M577 vehicle. It is used as an operational staff officer's command post at Brigade and Battalion level. It can also be configured as a Fire Direction Centre. The M577A4 carries 7 personnel including driver, vehicle commander and staff officers.



M548A4 CARGO CARRIER

The M548A4 Cargo Carrier is the next generation modernized version of the M548 vehicle. It is the unarmoured derivative of the M113 family and is capable of transporting 4,800 kg of ammunition and general cargo to forward areas to support field units. The M548A4 is configured with a driver's cabin capable of carrying 4 personnel including driver and 3 passengers. A self-defence 12.7 mm MG is also mounted on top of the crew cabin.



M901A4 ANTI-ARMOR

The M901A4 Anti-Armour is the next generation modernized version of the M901 vehicle. It is designed to carry an overhead M220 2xTOW launcher with 10 stowed ATGM rounds inside the vehicle. It carries 4 personnel including driver, commander, gunner, and loader.



M113A4 MEDICAL EVACUATION (AMBULANCE)

The M113A4 ME (Ambulance) is the next generation modernized version of the M113A1 and A2 Ambulance vehicles. The vehicle is a highly manoeuvrable, tracked armoured ambulance designed primarily for casualty evacuation from forward battle areas. It carries a driver and a medic with either 2 patients, on stretchers and 4 seated patients or 9 seated patients.

IACV-15A2

CAPABILITY ENHANCEMENT & LIFE EXTENSION PROGRAM



Data subject to change without notice.





Up to 2.700 ACV produced by FNSS are serving in the Turkish Land Forces, as well as in the Armed Forces around the world. FNSS started to supply these vehicles since 1991, and the final production batch was delivered to its worldwide users in 2004.

The ACV, operating independently or in conjunction with tanks, serves as the backbone of the armoured infantry.

As with all other post-Cold War era vehicles, ACVs have also started to fall behind modern armoured vehicles which are designed to operate in hybrid warfare. The intention in this regard is to keep the vehicles up-to-date, in line with the changing threat perception improving their performances and enabling them to continue serving throughout their extended service lives. The vehicle modernisation package is designed in accordance with the feedback received from recent deployments and operations in which they were used. It is aimed at improving its survivability, situational awareness and firepower.

FNSS ACV-15A2 modernisation solution consists of:

- Optimum survivability including improved protection against mines, RPG's and kinetic energy threats.
- Improved situational awareness with integration of up-to-date mission equipment's such as: BMS, driver vision system, laser warning system, navigation and GPS or GNSS systems.
- Increased firepower with new generation, medium calibre manned or remote-controlled turrets and weapon stations.



ACV-15A2 CAKA DUAL RWS



ACV-15A2 SANCAK RWS



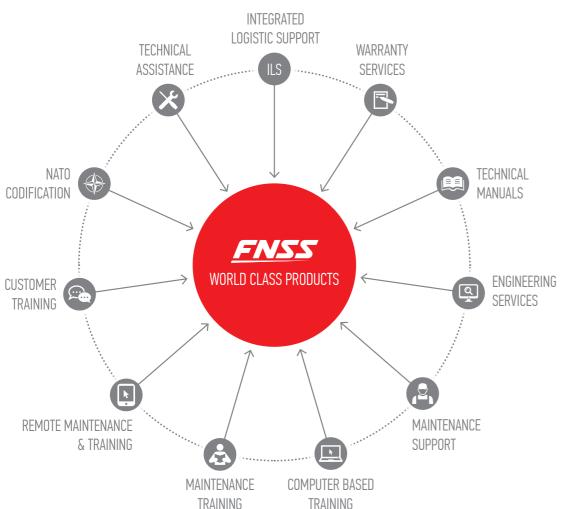
ACV-15A2 SABER RCT













FNSS responds to the needs of numerous land platform users worldwide, making a difference not only with the superior survivability, mobility and firepower of its vehicles, thanks to also the integrated logistic support (ILS) solutions it offers to its users. For 30 years, the company has been providing uninterrupted support for all of its vehicles, including the very first ones delivered years ago.

FNSS' customers include armed and security forces of nations with the highest standards and greatest expectations, and the company follows the world's leading standards and practices in its ILS works. The company reflects its 30 years of experience on its ILS activities, which include a very wide range of solutions such as working together with local partners, supporting the vehicles directly during operations, establishing local offices, as well as Government Owned Company Operated (GOCO) model.

FNSS meticulously carries out the following as part of its ILS activities:

- Preparation of Technical Data Packages in line with user requests, and management of these packages as live and continuously updated documents throughout the life cycle of its products,
- Preparation of comprehensive Technical Training Packages, which are developed after analysing the user needs, and are kept easily accessible and understandable for greater utility. In addition to training the personnel who will use and maintain its vehicles, FNSS also offers programmes for instructors' training. Moreover, it can also prepare technical documentation that takes into account the user's level and the maintenance work involved, and that can also be interactive if desired, and then deliver this documentation together with the vehicles.
- Offering of user-focused technical services under any circumstances and throughout the vehicle's life cycle. The range of technical services offered include: Troubleshooting, maintenance and repair services; data collection and registration (DCR), data analysis and design improvement; interactive remote maintenance services; depot-level maintenance services; provision of spare parts from original equipment manufacturers; and the supply of special kits and testing equipment.





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