

FNSS

FNSS Savunma Sistemleri A.Ş.
Ogultbey Mahallesi Kumludere Caddesi No: 11
Gölbasi 06830 Ankara
TÜRKİYE

P +90 (312) 497 43 00
F +90 (312) 497 43 01 - 02
E info@fnss.com.tr

www.fnss.com.tr

FNSS

PRODUCT CATALOGUE 2022-1



FNSS



FNSS SAVUNMA SİSTEMLERİ A.Ş.

[f](#) [v](#) [i](#) [t](#) | www.fnsssocial.com

2	COMPANY PROFILE
	TRACKED ARMoured COMBAT VEHICLES
6	KAPLAN MT
8	KAPLAN NG-AFV
10	KAPLAN-10
12	MAV
14	ACV AD
16	ACV-19
20	ACV-15
	WHEELED ARMoured COMBAT VEHICLES
26	PARS IV 8X8
28	PARS IV 6X6 S-OPS
30	PARS III 8X8
34	PARS III 6X6
36	PARS SCOUT 8X8 AND 6X6
38	PARS 4X4
	COMBAT ENGINEERING VEHICLES
42	AACE
44	OTTER
	UNMANNED GROUND VEHICLES
50	SHADOW RIDER
	TURRET SYSTEMS
54	TEBER-30
56	TEBER-30/35 RCT
58	SABER
60	SABER 25 RCT
62	SANCAK RWS
64	CAKA RWS
66	ARCT
	MODERNIZATION
70	M113 FoV
74	ACV-15A2
78	INTEGRATED LOGISTICS SUPPORT (ILS)



**Globally trusted and respected
Turkish partner in defence.**

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



PROTECTED MOBILITY AT YOUR SERVICE!

A GLOBALLY TRUSTED AND RESPECTED TURKISH DEFENCE COMPANY

FNSS is a globally recognized land systems company that specialises 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.



FNSS

SAVUNMA SİSTEMLERİ A.Ş.

OVERVIEW



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 its 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

FNSS

KAPLAN MT | KAPLAN NG-AFV | KAPLAN-10 | MAV | ACV AD | ACV-19 | ACV-15





KAPLAN MT Technical Specifications

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

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 SYSTEMS	
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.

ARMAMENT	
Main Armament	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	+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
Communication Equipment	UHF/VHF Radios
	Wireless Crew Intercommunication System
Auxiliary Power Unit (APU)	Standard

KAPLAN MT

OVERVIEW



The new generation KAPLAN MT is the sole and exclusive modern Medium Weight Tank designed with rear powerpack and not a conversion of a variant from an existing IFV.

Its unique design provides the lowest silhouette and highest power-to-weight ratio in its class. Its platform is designed for optimum weight and high mobility performance. The latest technology powerpack combined with advanced electronic controls and the heavy-duty suspension system allow maximum mobility in any battlefield condition. The Auxiliary Power Unit (APU) ensures the availability of continuous power with reduced signature during night operations where the vehicle operates mostly in static position.

The KAPLAN MT's design architecture provides a superior level of battlefield survivability that includes advanced ballistic, best-in-class mine protection systems and adequate firepower, the latter ensuring near-real time response against most battlefield threats.

The interior of the vehicle is engineered with careful consideration of the ergonomics of the crew and different tactical and battlefield conditions including driving, firing and ammunition load/unload. The KAPLAN MT is equipped with day and thermal cameras for the driver, a multi-functional digital driver dashboard and a 3rd generation high performance sighting system for the gunner and commander. In addition, Battlefield Management System (BMS) and Laser Warning System (LWS) are also available to provide tactical and situational awareness for the crew.

The KAPLAN MT is fitted with the latest generation John Cockerill 3105 turret, armed with high-pressure 105 mm Cockerill® gun, which gives it a unique anti-armour punch. The Cockerill® 3105 is the most advanced and capable light 105 mm turret in its class. It is ideal for infantry support and medium weight tank roles. The 3105 has a unique indirect firing capability that permits engagement in urban and other complex terrains.





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 SYSTEMS	
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

KAPLAN NG-AFV

NEW GENERATION ARMoured FIGHTING VEHICLE

OVERVIEW



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

Data subject to change without notice.

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

MOBILITY	
Engine	Diesel
Transmission	Fully Automatic
Max. Road Speed	65 km/h
Range	> 525 km
Gradient	70%
Side Slope	40%
Vertical Obstacle	0.75 m
Trench Crossing	1.8 m
Amphibious Capability	Standard
Max. Water Speed	6.3 km/h
Suspension System	Torsion Bar

PROTECTION & LIFE SUPPORT SYSTEMS	
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

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	<ul style="list-style-type: none">• 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

KAPLAN-10

OVERVIEW



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 variants.

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



Watch the Video



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

ARMAMENT	
Turret Type	CAKA Remote Controlled Turret (RCT)
Main Armament	40 mm AGL & 12.7 mm MG
Elevation	-7° to +45°, Electrical
Traverse	360° Continuous
Sight 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

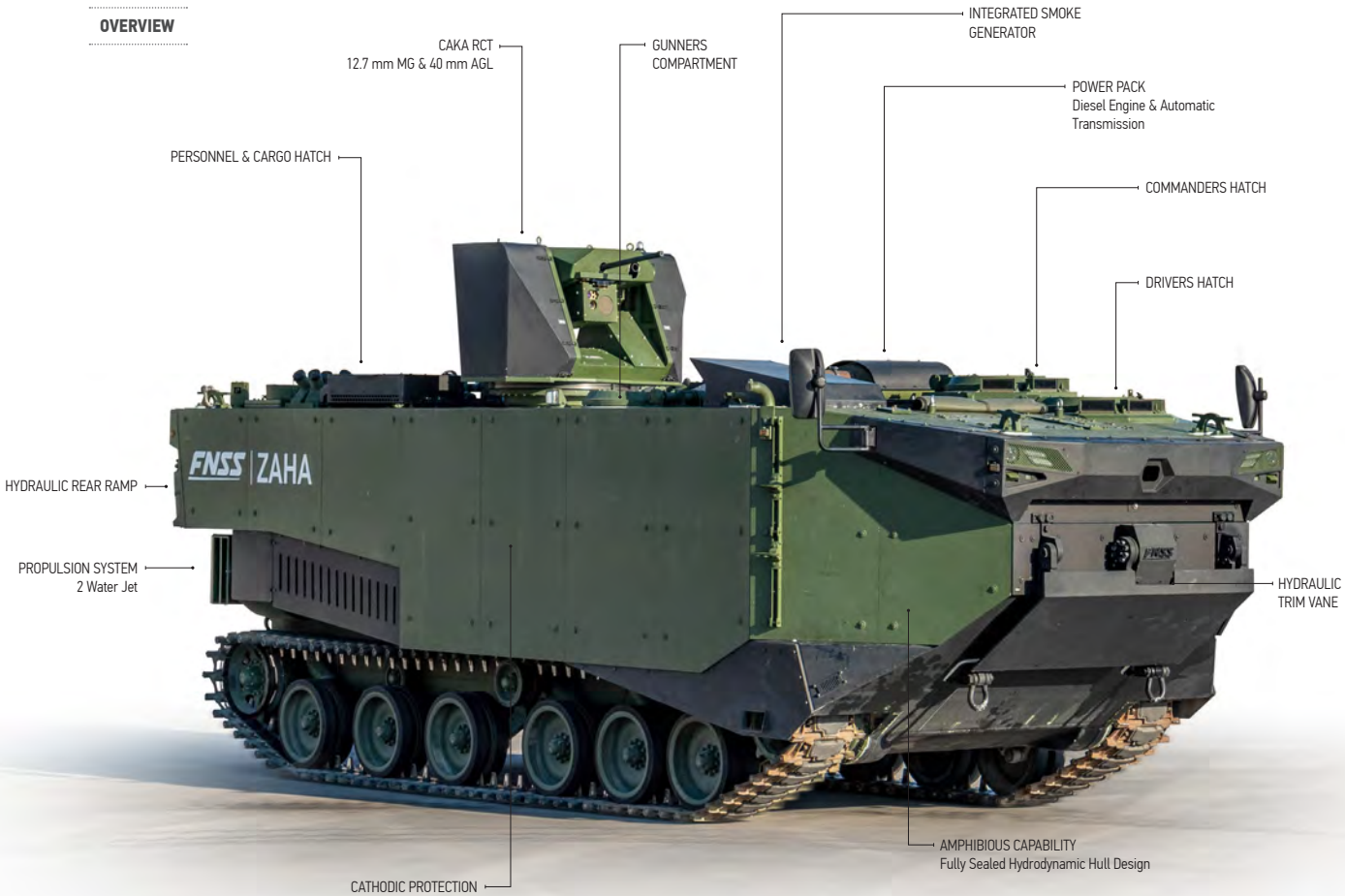
Data subject to change without notice.



Watch the Video

MAV

MARINE ASSAULT VEHICLE



The Marine Assault Vehicle (MAV) is the latest technology amphibious vehicle designed by FNSS to meet amphibious operational requirements.

During the beach landing phase of an amphibious operation, these vehicles are launched from landing helicopter docks (LHD) and are able to rapidly cover the distance between the vessel and the shore, allowing marine units to land under armour protection. Once on land, they are able to operate alongside other armoured vehicles. The MAV fire power is provided by the purposely designed CAKA dual remote-controlled turret that can be armed with a 12.7 mm MG and a 40 mm AGL. Designed to support dual operations based on their mission requirements, armoured amphibious assault vehicles need to ensure superior capabilities both at sea and on land. 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.

The base vehicle can be configured in different variants such as Personnel Carrier and Command Post. Few navies worldwide possess such a capability.

The FNSS MAV carries the armour protected amphibious fighting vehicle concept into the 21st century. Compared to similar systems, the MAV can be considered superior in the following respects:

- Number of transported personnel,
- Level of ballistic and mine protection,
- New generation remote controlled turret,
- Performances on land and afloat.



ACV AD Technical Specifications

Data subject to change without notice.

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)
Suspension System	Torsion Bar

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

ACV AD

AIR DEFENCE SYSTEM PLATFORM

OVERVIEW



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 command-and-control and fire missions from the same platform.



ACV AD HISAR Deployment Position



ACV AD HISAR Operational Position

Watch the Video





ACV-19 Technical Specifications

Data subject to change without notice.

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

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

ARMAMENT	
Type	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

ACV-19

ARMOURED COMBAT VEHICLE

OVERVIEW

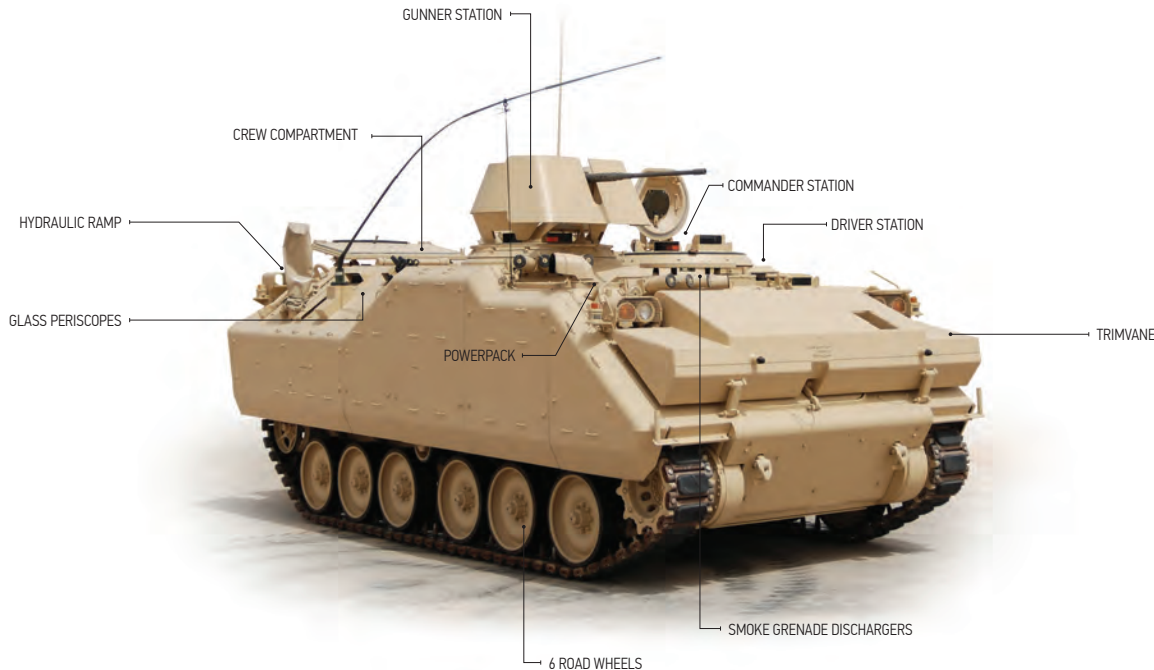


The ACV-19 (Armoured Combat Vehicle) is the general name for 15-19 ton weight class, modern high performance vehicles derived from the highly successful FNSS ACV. These vehicles have proven themselves with numerous armies worldwide. The ACV-19 offers the latest developments in high value vehicle performance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

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.





VARIANTS

**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**ARMoured COMBAT VEHICLE****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.

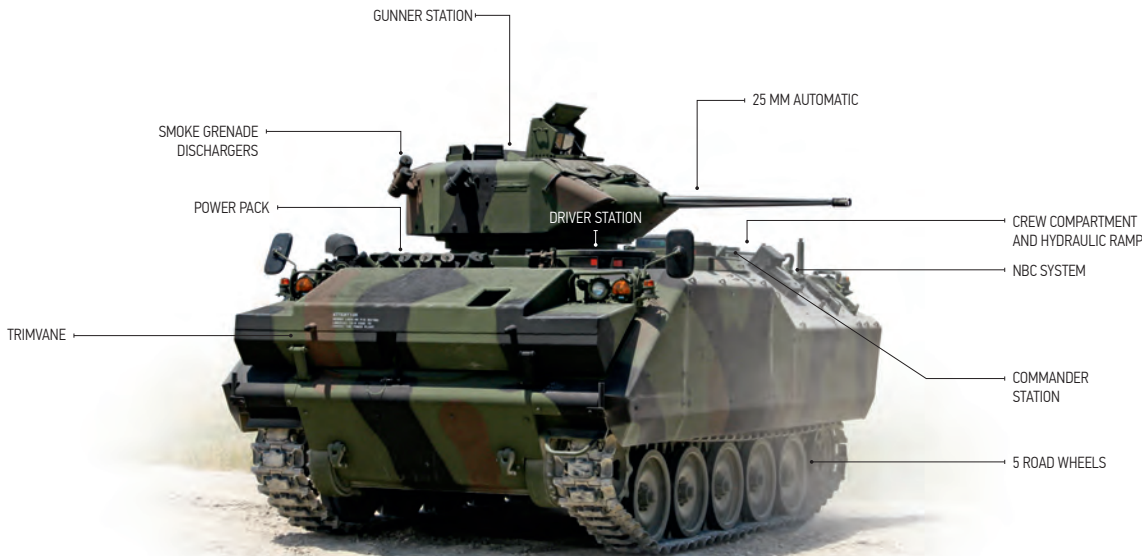


ACV-15 Technical Specifications

Data subject to change without notice.

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

PROTECTION & LIFE SUPPORT SYSTEMS	
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
MISSION EQUIPMENT	
Driver Vision System	Thermal Cam. & Display
Electrical System	24 V



ACV-15

ARMoured COMBAT VEHICLE

OVERVIEW



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.





ACV-15

ARMoured COMBAT VEHICLE

VARIANTS



AAPC

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.



SPM81

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.



ARV

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.



AIFV

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.



AESV

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.



CPV

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.



AMEV

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

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

FNSS

PARS IV 8x8 | PARS IV 6x6 S-OPS | PARS III 8x8 | PARS III 6x6 | PARS SCOUT 8x8 AND 6x6 | PARS 4x4





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	> 600 km
Gradient	60%
Side Slope	30%
Angle of Approach	> 35°
Angle of Departure	> 35°
Vertical Obstacle	0.7 m
Trench Crossing	2 m
Turning Radius	< 8.5 m
Fording Depth	1.5 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 SYSTEMS	
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	
Type	Manned and Remote Controlled Turrets, Mortar and/or Missile Systems from Various Types and Origin Can be Integrated

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 Equipment
Auxiliary Power Unit (APU)	Optional

PARS IV 8x8

NEW GENERATION WHEELED ARMOURED VEHICLE (NG-WAV)

OVERVIEW



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 vehicles.

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
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

PROTECTION & LIFE SUPPORT SYSTEMS	
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	
Turret Type	SANCAK RWS <ul style="list-style-type: none">• Two Independent and Simultaneously Controlled Turrets Front and Rear• Stabilised and Day/Night• Ballistic Protected• Universal Mount<ul style="list-style-type: none">• 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
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

OVERVIEW



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

threat cannot be estimated. The high 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.

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



Watch the Video



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	
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 SYSTEMS	
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	
Type	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

Watch the Video



PARS III 8x8

WHEELED ARMoured COMBAT VEHICLE (WACV)

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 gunner.



PARS III 8X8 ICV

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.



PARS III 8X8 CFV

The CFV variant is the Cavalry Fighting Vehicle configuration of the PARS III 8x8 FoV. The vehicle is fitted with a TEBER manned or remote-controlled 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.

Data subject to change without notice.

PARS III 8x8

WHEELED ARMoured COMBAT VEHICLE (WACV)

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 mortar crew.



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.

PROTECTION & LIFE SUPPORT SYSTEMS	
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	
Type	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 Crew Intercommunication System
Electrical System	MIL STD 1275, MIL STD 461 Isolated High Power for Mission Equipment
Auxiliary Power Unit (APU)	Optional



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 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. 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 air-conditioning 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.




PARS SCOUT 6x6 and 8x8 Technical Specifications


Data subject to change without notice.

GENERAL	
Power-to-weight Ratio	20 Hp/ton
Length	< 7 m (PARS SCOUT 6x6)
	< 8 m (PARS SCOUT 8x8)
Width	< 3 m
Height Hull Roof	< 2.5 m
Air Transportation	A400M, C-5, C-17, IL-76, AN-124
MOBILITY	
Engine	Diesel
Transmission	Fully Automatic, 6 Forward, 1 Reverse
Max. Road Speed	100 km/h
Range	> 700 km
Gradient	60%
Side Slope	30%
Angle of Approach	> 42°
Angle of Departure	> 35°
Vertical Obstacle	0.7 m
Trench Crossing	1.4 m (PARS SCOUT 6x6)
	2 m (PARS SCOUT 8x8)
Turning Radius	< 9 m (PARS SCOUT 6x6)
	< 10,5 m (PARS SCOUT 8x8)
Fording Depth	1.7 m
Suspension System	Independent, Double Wishbone, Hydro-Pneumatic Suspension with Ride Height Control


PROTECTION & LIFE SUPPORT SYSTEMS	
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	
Type	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
	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



PARS SCOUT 8x8
Sensor Reconnaissance Vehicle



PARS SCOUT 8x8
CBRN Reconnaissance Vehicle



PARS SCOUT 8x8
Armoured Combat Vehicle

PARS SCOUT

SPECIAL PURPOSE VEHICLE (SPV)

OVERVIEW

The PARS SCOUT 6x6 and 8x8 are the new members 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 6x6 and 8x8 modern tactical wheeled armoured combat vehicles are designed to be used in low and high-intensity scenarios, offering strategic advantages to their user thanks to their unique features, and incorporate the most advanced technologies. Both vehicles have a power-to-weight ratio of 20 Hp/ton, and are powered by diesel engines. The PARS SCOUT 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.



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, soft 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, and the hydro-pneumatic suspension system provides the best road holding and ride height for different road conditions.

The PARS SCOUT has a range of over 700 km, and it has under-armour protected fuel tanks. The vehicle is fitted with run-flat tires and with a self-recovery winch.

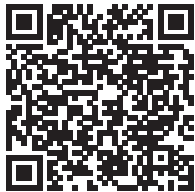
The two-man cab at the front of the vehicle is protected by ballistic glass, and provides a 230° horizontal field of view, high driving safety, situational awareness and comfort.

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 door covers, personnel seats, infantry rifle holders and interior lighting elements are designed to provide comfort to transported personnel.

The PARS SCOUT hull can be brought to the level of protection required by the user thanks to its modular-designed armour system.

The hull shape, underbelly structure, base 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.



Watch the Video



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.

PROTECTION & LIFE SUPPORT SYSTEMS	
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	
Main Armament	ARCT Anti-Tank Remote Controlled Turret that can be armed with KORNET-E, MIZRAK-O, SKIF and other missiles
Secondary Armament (Coaxial)	7.62 mm MG
Fire Control System	<ul style="list-style-type: none">Thermal Camera - Day CameraLaser Range FinderGunner Control SystemStabilised 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



Watch the Video

PARS 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.



PARS 4x4
Sensor Reconnaissance Vehicle



PARS 4x4
with KORNET-E ARC-T



PARS 4x4
with OMTAS ARC-T

COMBAT ENGINEERING VEHICLES

FNSS

AACE | OTTER





AACE Technical Specifications

Data subject to change without notice.

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)

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

AACE

ARMOURED AMPHIBIOUS COMBAT EARTHMOVER

OVERVIEW



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° high-manoevrability 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

Data subject to change without notice.

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

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

OTTER

RAPID DEPLOYABLE AMPHIBIOUS WET GAP CROSSING SYSTEM

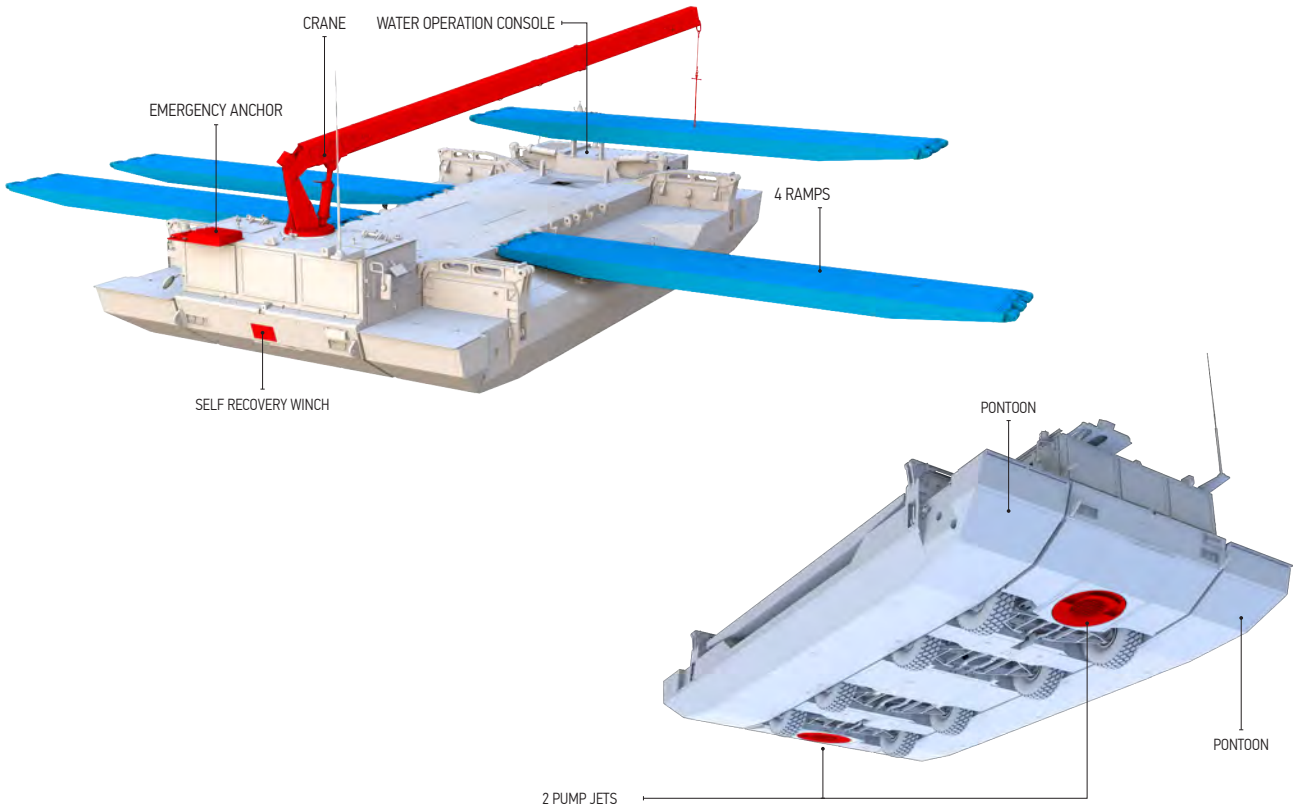
OVERVIEW



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.



Watch the Video

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.

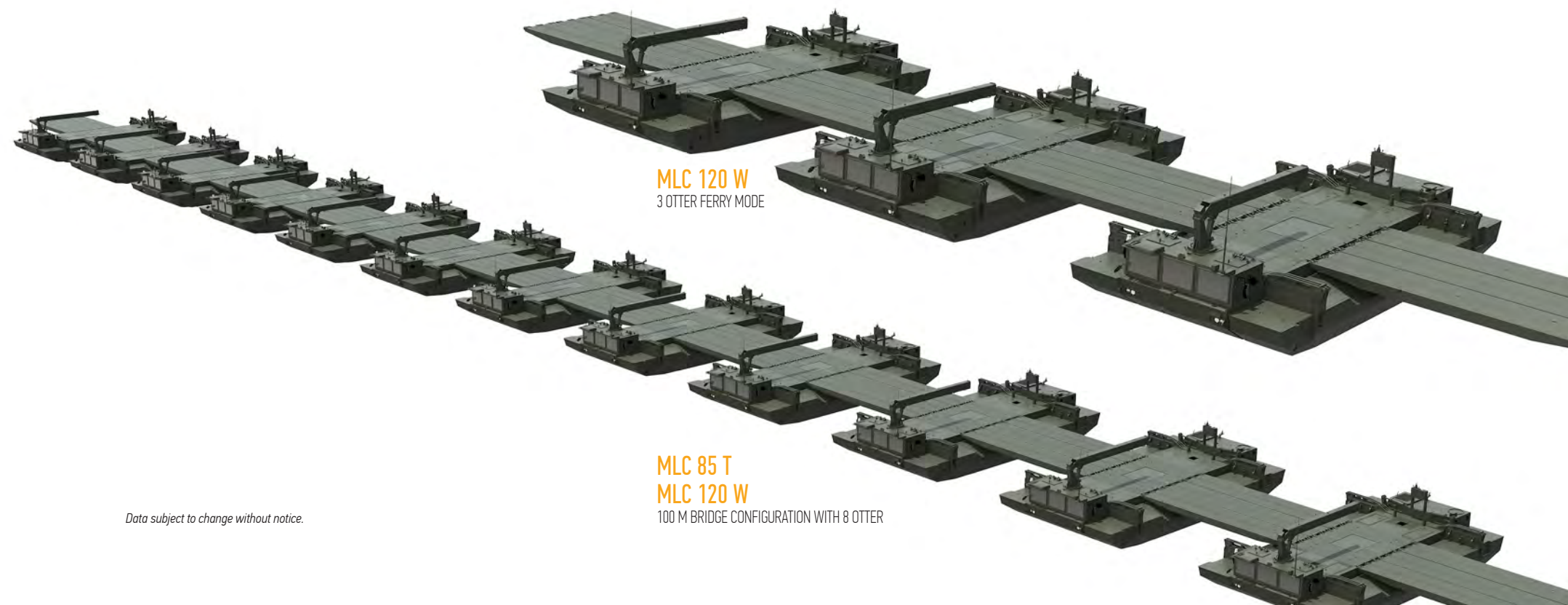


In terms of self-sufficiency, the OTTER can carry four ramps on a single system, which eliminates the need for additional logistic vehicles. The OTTER is also fitted with a self-recovery winch, which recovers the vehicle or any other system especially in soft terrains.

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 significant advantages of the system.



OTTER

RAPID DEPLOYABLE AMPHIBIOUS WET GAP CROSSING SYSTEM



MLC 21 T
SINGLE OTTER FERRY MODE

MLC 85 T
2 OTTER FERRY MODE

MLC 120 W
3 OTTER FERRY MODE

MLC 85 T
MLC 120 W
100 M BRIDGE CONFIGURATION WITH 8 OTTER

UNMANNED GROUND VEHICLES

FNSS

SHADOW RIDER





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

ARMAMENT	
Type	Remote Controlled Turrets and Missile Systems from Various Types and Origin Can be Integrated
AUTONOMY AND REMOTE CONTROL FEATURES	
RF and LTE Communication	
Antijam GNSS	
Waypoint Navigation and Patrol Capabilities	
Leader-Follower Capabilities in GNSS Denied Areas	
Obstacle Detection and Avoidance Capabilities	

Data subject to change without notice.



 Watch the Video

SHADOW RIDER

HIGH MOBILITY, EFFECTIVE FIRE POWER, READY FOR MULTIOPERATIONAL MISSIONS

OVERVIEW



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 potential
- 360° detection system
- High firepower

Versatile Platform

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

TURRET SYSTEMS

FNSS

TEBER-30 | TEBER-30/35 RCT | SABER | SABER RCT | ARCT | SANCAR RWS | CAKA RWS





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

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

Data subject to change without notice.

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 double-chambered 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 targets.

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.

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.



Watch the Video



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

TEBER-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-to-fire 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 double-compartment 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 mid-wave 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 user-configurable 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 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 requirements and the turret can be configured with three options)	25 mm M242 Enhanced (Dual Feed Automatic) or
	40 mm AGL or
	12.7 mm MG
Number of Ready to Fire Rounds	25 mm 150 HE/90 AP-Total 240 Ready 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	
All Around Ballistic Protection	STANAG 4569 (Level Classified)
Smoke Grenade Dischargers	8

SABER

ONE-MAN MEDIUM CALIBER TURRET FOR INFANTRY FIGHTING VEHICLES

OVERVIEW



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.





SABER RCT Technical Specifications

Data subject to change without notice.

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/EI)
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	

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

OVERVIEW



The SABER-25 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-25 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 electro-optic 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-25 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.



Watch the Video



SANCAK RWS Technical Specifications

GENERAL	
Turret Type	Remote Controlled Turret
Main Armament	12.7 mm M2 Heavy MG or
	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	Electric Drive with Two-Axis Stabilisation



Data subject to change without notice.

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	
Low Ammunition Warning system	
Deck-clearance Algorithms for No-Fire Zones and No-Motion Zones	
Double Handle	

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

PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)

SANCAK RWS

OVERVIEW



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 Forces





CAKA RWS Technical Specifications

GENERAL	
Turret Type	Remote Controlled Turret
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	



Watch the Video



Data subject to change without notice.

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

PROTECTION	
All Around Ballistic Protection	STANAG 4569 (Level Classified)

CAKA RWS

OVERVIEW



The CAKA RWS offers great advantages thanks to its light weight, ballistic protection, target acquisition, reliability and accuracy. Being unmanned, it occupies less internal volume inside the vehicle.

The CAKA RWS was purposely designed for being installed on the MAV amphibious assault vehicle. A number of solutions were therefore adopted to protect it against the effects of sea water, in order to ensure maximum reliability, as it must provide the much needed 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.

The CAKA RWS is power operated and armed with a 12.7 mm MG (.50 Cal) and a 40 mm AGL (Automatic Grenade Launcher). The remote turret can be fitted to various manned and unmanned ground vehicles, as well as naval surface vessels.

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



TACTICAL VEHICLES



WHEELED ARMoured COMBAT VEHICLES



TRACKED ARMoured COMBAT VEHICLES



SURFACE VESSELS



ARCT Technical Specifications

GENERAL	
Turret Type	Remote Controlled Turret
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

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)

Data subject to change without notice.



ARCT

ANTI-TANK REMOTE CONTROLLED TURRET

OVERVIEW

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 electro-optical systems independently of the vehicle's battery status, for increased mission endurance.



MODERNISATION

FNSS

M113 | ACV-15A2





M113 FoV Technical Specifications

GENERAL	
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

PROTECTION & LIFE SUPPORT SYSTEMS	
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

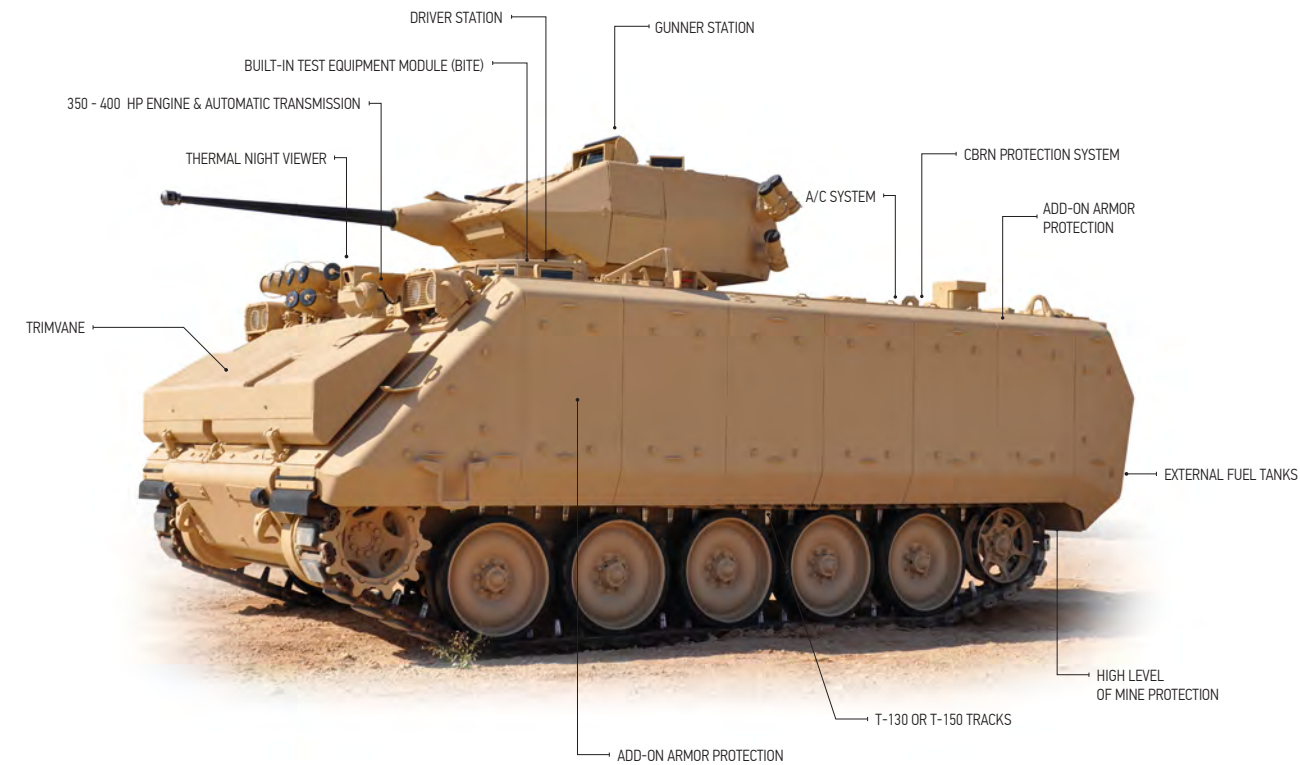
MISSION EQUIPMENT	
Driver Vision System	Thermal Cam. & Display
Electrical System	24 V

Data subject to change without notice.

M113 FoV

CAPABILITY & SUSTAINMENT PROGRAMME

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.



Watch the Video



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.



M113A4 ARV

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.

M113 FoV

CAPABILITY & SUSTAINMENT PROGRAMME

VARIANTS



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.

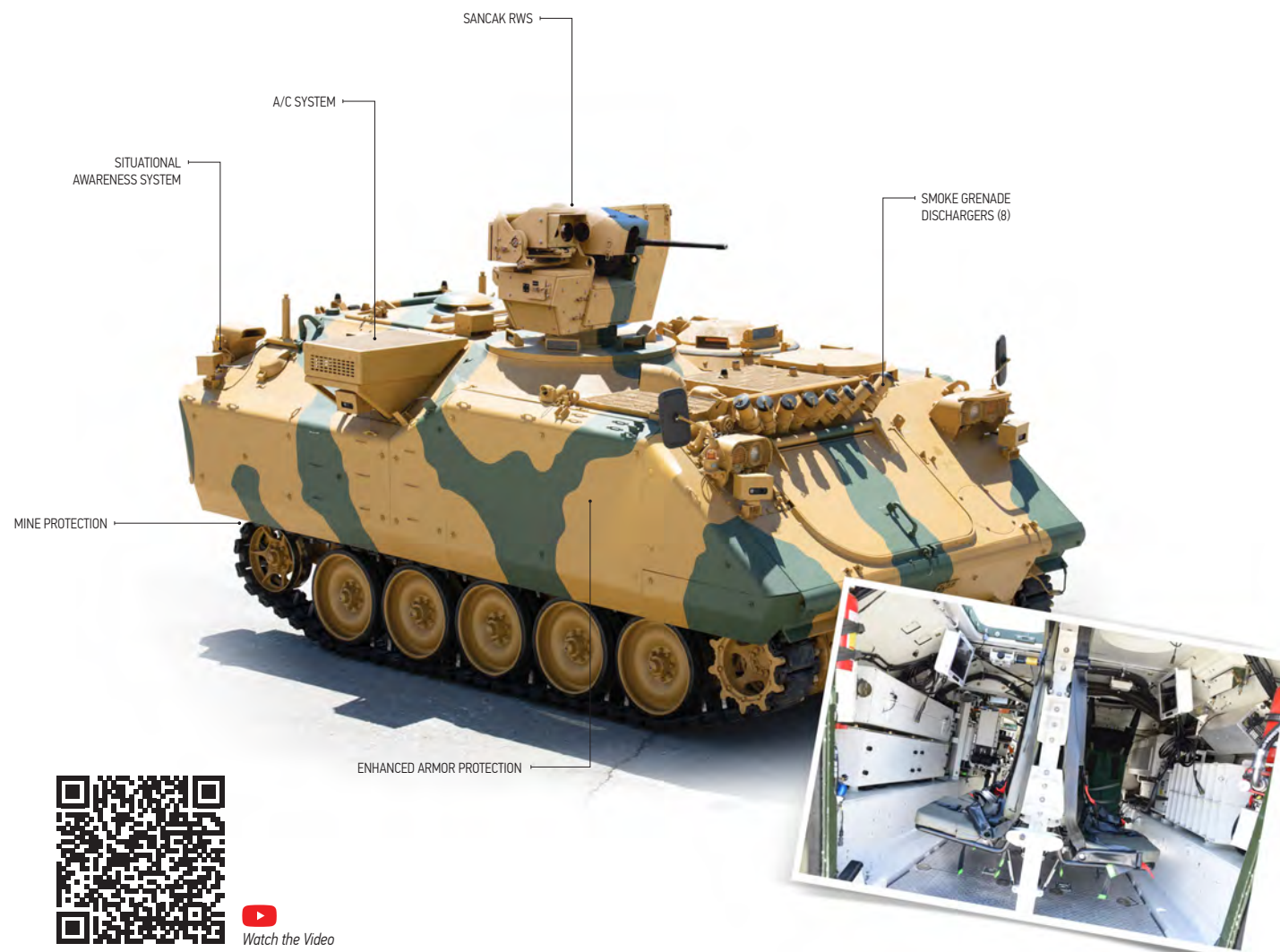


M113A4 MEDICAL EVACUATION (AMBULANCE)

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.



Data subject to change without notice.



Watch the Video

ACV-15A2

CAPABILITY & SUSTAINMENT PROGRAMME

MODERNISATION

75

OVERVIEW



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 25 RCT

ILS

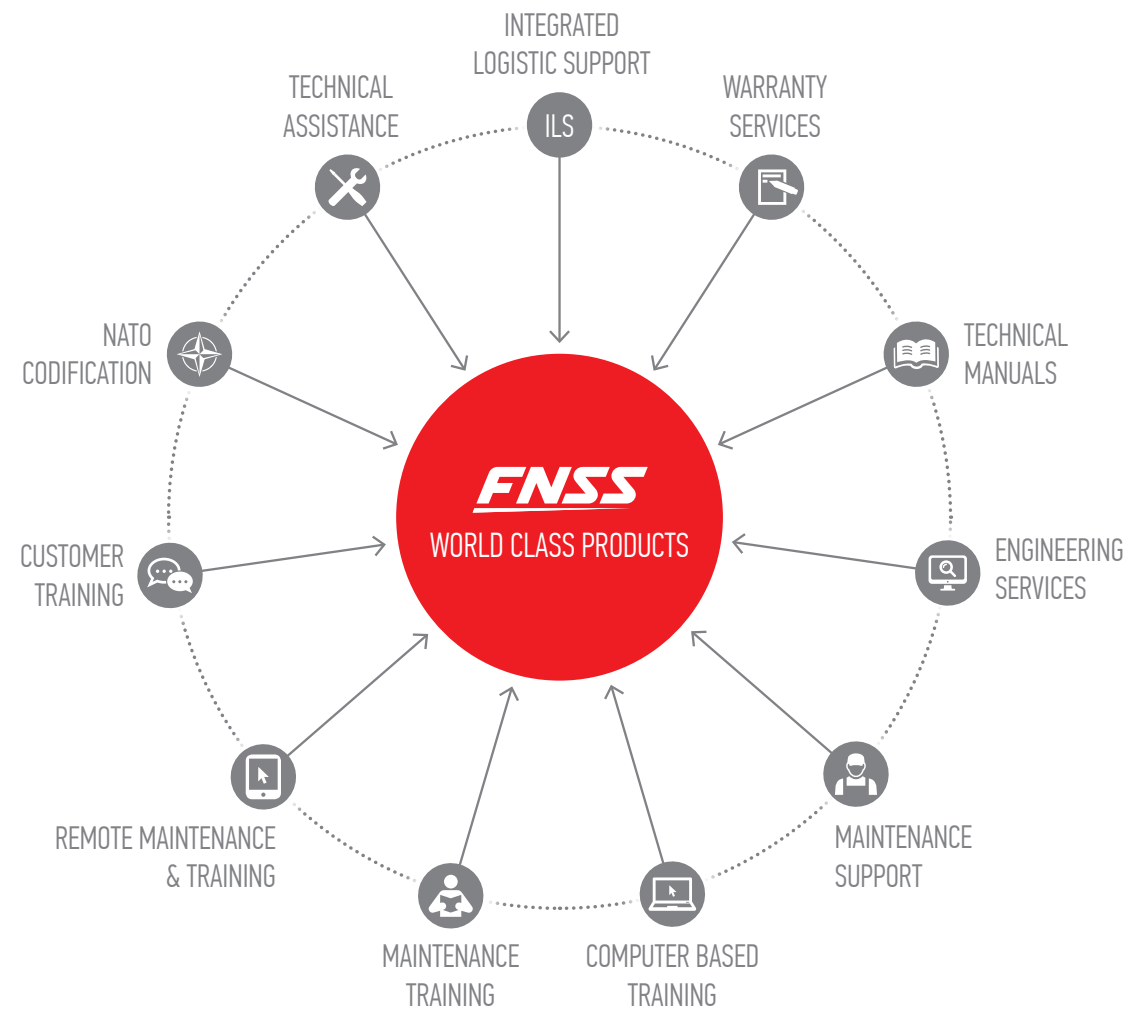
FNSS

INTEGRATED LOGISTICS SUPPORT





OVERVIEW



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.



FNSS Savunma Sistemleri A.Ş.
Ogultbey Mahallesi Kumludere Caddesi
No: 11 Goltbasi 06830 Ankara
TÜRKİYE

P +90 (312) 497 43 00
F +90 (312) 497 43 01 - 02
E info@fnss.com.tr

www.fnss.com.tr

www.fnssocial.com

