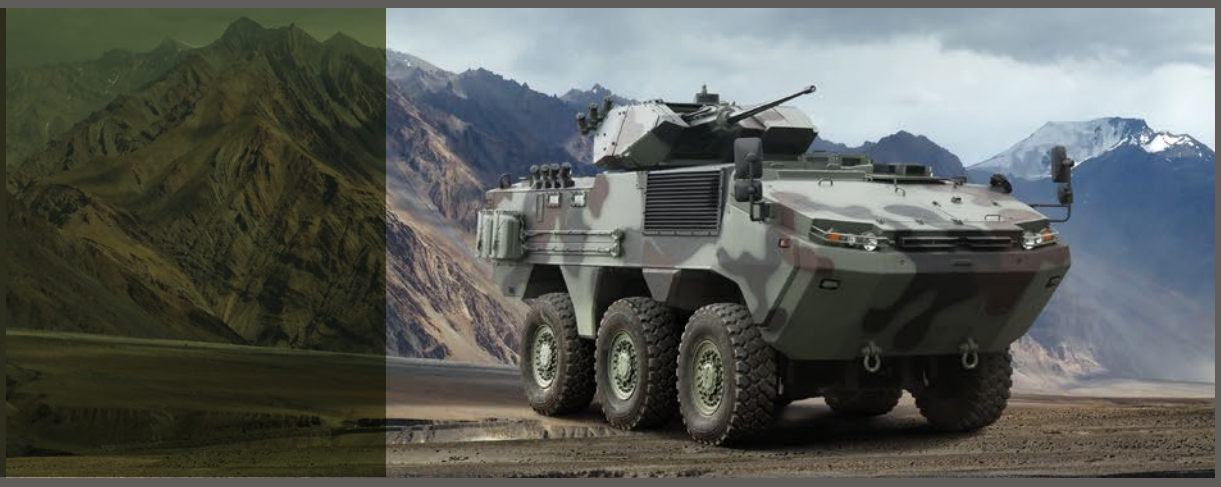

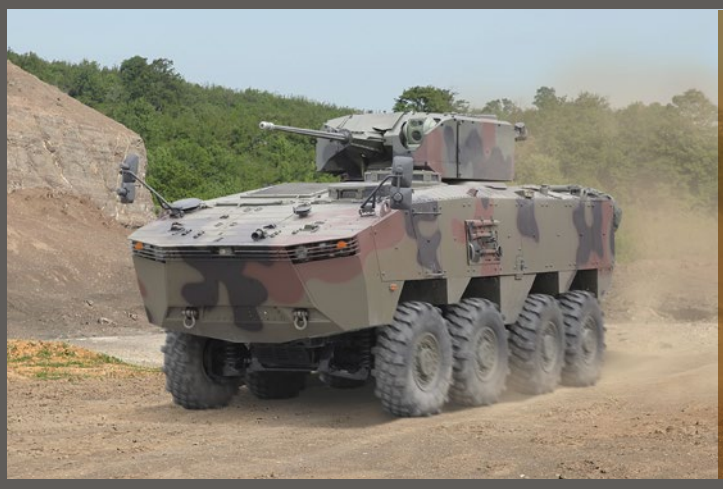

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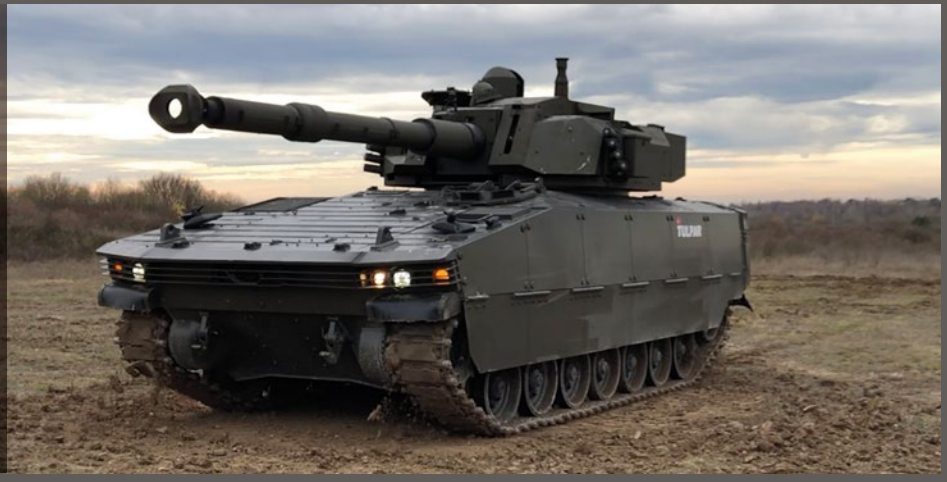
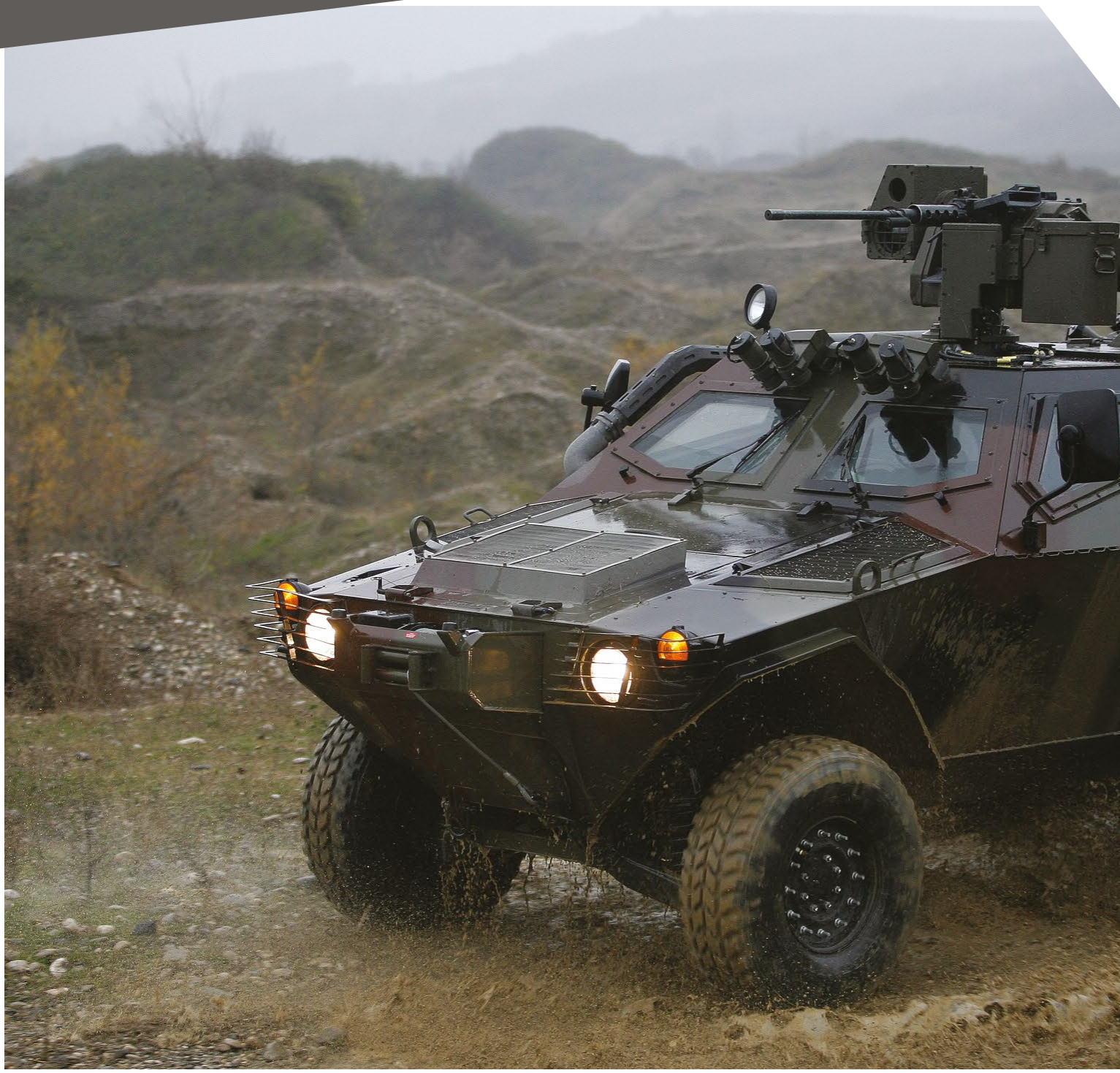
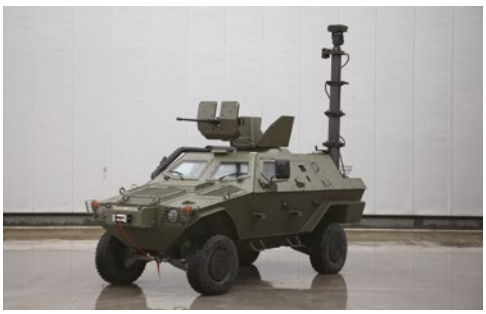
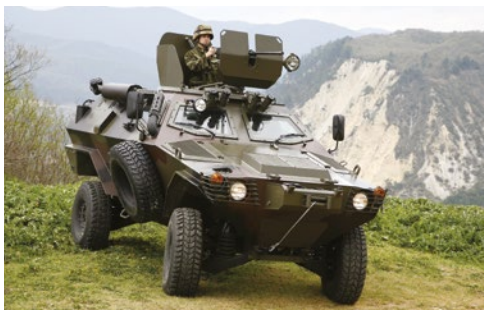


COBRA

4x4 TACTICAL WHEELED ARMORED VEHICLE

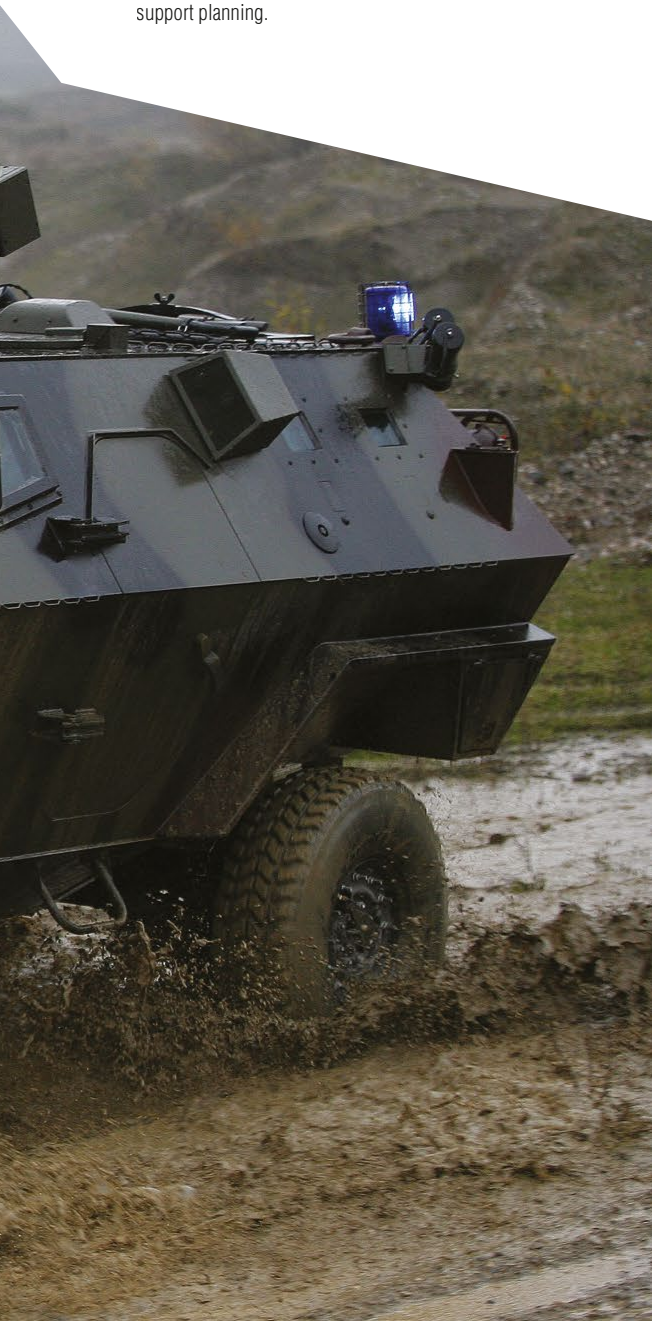


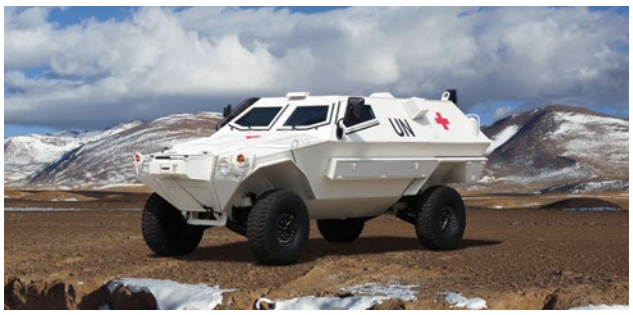




Having proven itself worldwide among various geographical regions and climates, COBRA is an ideal platform for different weapon systems. Thanks to its remarkable ballistic protection, superior mobility as well as, the modular design adaptable to various missions, COBRA is always ready for the mission.

Versatility in design and adaptability to various missions are among the significant design assets of COBRA. Common platform concept also helps the training, maintenance, and the logistic support planning.





COBRA TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	6700 kg
Maximum Crew Capacity	Up to 9, including driver and commander
Length	5480 mm (with winch)
Width	2240 mm
Height Over Hull	2100 mm
Ground Clearance	400 mm
ENGINE	Turbo Charged Diesel Engine 190 HP
TRANSMISSION	Automatic
TRANSFER CASE	Full time, 4 wheel drive with lock, 2-speed
AXLES	Independent double A-frame, with hypoid differentials
SUSPENSION	Helical coil suspension
BRAKES	Servo assisted hydraulic disc brakes
STEERING	Power assisted
TYRES	37x12,5O R 16,5 lt with run-flat system
ELECTRICAL SYSTEM	24 V, 12 V, 120 Ah Maintenance-free Batteries, 28 V Alternator

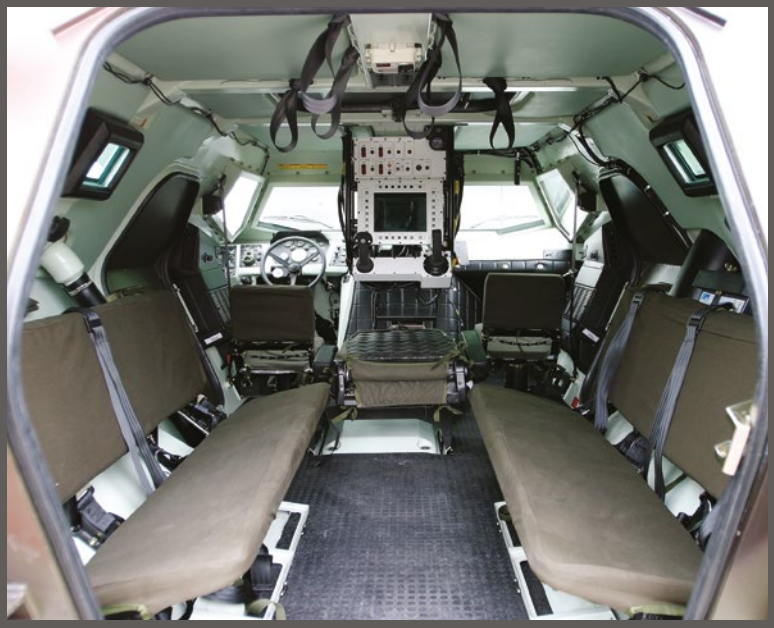
PERFORMANCE DATA	
Maximum Speed	100 km/h
Swimming Speed (Amphibious version)	8 km/h
Fording Depth	1000 mm
Side Slope	40%
Gradeability	60%
Vertical Obstacle	400 mm
Trench Crossing	800 mm
Angle of Approach	56° (w/winch)
Angle of Departure	57°
Range	600 km

STANDARD FEATURES

Central Tyre Inflation System
Radial Tyres with Run Flat Inserts
Air Conditioning System / Heater
Roof Hatches
Gun Ports and Vision Blocks
Towing Eye
Blackout Lighting System, NATO Type Blackout System
Jump Start Socket
Radio Provisions
Safety Belts for Crew
Air Extraction Fan

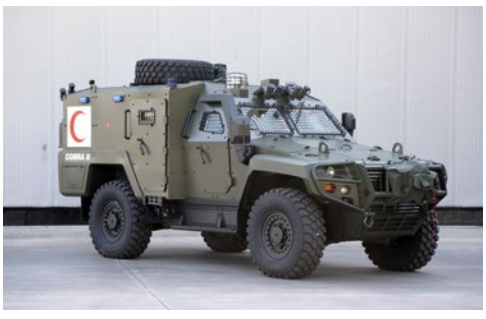
OPTIONS

Amphibious Capability
Winterization Kit
360° Situational Awareness System
Electrical Self Recovery Winch (5,5 ton capacity)
CBRN Filtration System
Automatic Fire Extinguishing and Explosion Suppression System
Radio / Intercom System
Smoke Grenade Launchers
Driver's Vision Enhancement System
Night Vision Periscopes (For Driver and Commander)
Search Light
Navigational System (GPS/INS)
Barricade Remover
Fog Light



COBRA II

4x4 TACTICAL ARMORED VEHICLE

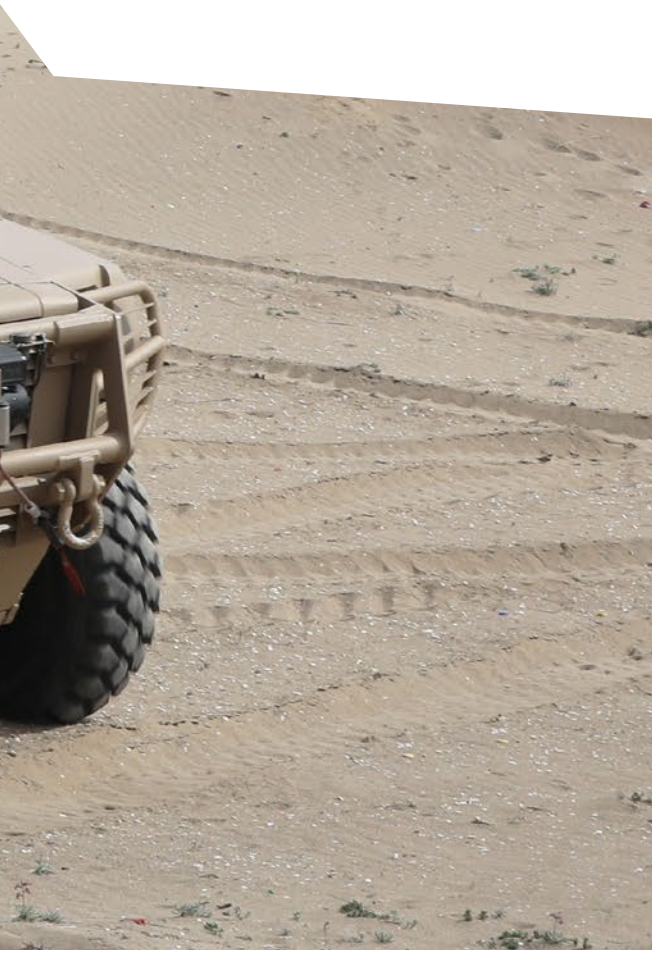


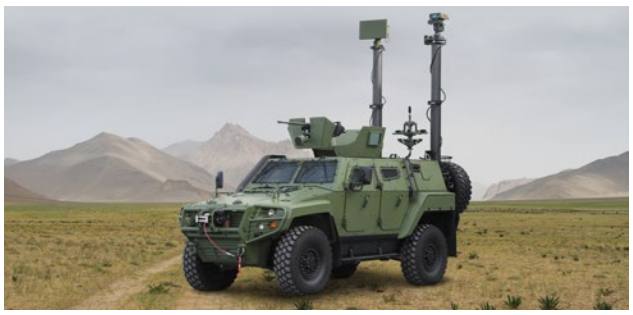
COBRA II 4x4 Tactical Armored Vehicle is a modular platform with superior technical and tactical characteristics.

Besides outstanding mobility, COBRA II provides superior ballistic and mine protection, increased payload capacity and internal space.

With its wide range of weapon integration and mission equipment options COBRA II can serve various types of missions including urban areas and peacekeeping purposes.

COBRA II provides an outstanding performance in a wide range of challenging terrains and climatic conditions.





COBRA II TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	Up to 14500 kg
Maximum Crew Capacity	Up to 11, including driver and commander
Length	6400 mm (with winch and spare wheel)
Width	2500 mm
Height Over Hull	2300 mm
Ground Clearance	400 mm
ENGINE	Turbo Charged Diesel Engine 360 HP
TRANSMISSION	Automatic
TRANSFER CASE	Two speed with differential lock
AXLES	Differentials with lock and geared wheel hubs
SUSPENSION	Fully Independent suspension with spring & shock absorber
BRAKES	Dual circuit disk type break system with ABS
STEERING	Hydraulic assisted power steering with adjustable steering wheel. Right or left hand drive
TYRES	395/85 R20 with run-flat system
ELECTRICAL SYSTEM	24 V, 12 V, 120 Ah Maintenance-free Batteries, 28 V Alternator

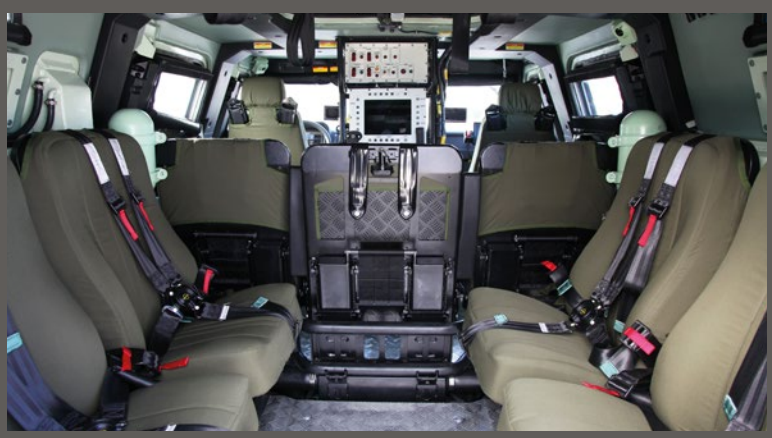
PERFORMANCE DATA	
Maximum Speed	110 km/h
Fording Depth	1000 mm
Side Slope	30%
Gradeability	60%
Vertical Obstacle	500 mm
Trench Crossing	1000 mm
Angle of Approach	45°
Angle of Departure	55°
Range	700 km

STANDARD FEATURES

Central Tyre Inflation System
Radial Tyres with Run Flat Inserts
Anti-Locking Brake System (ABS)
Air Conditioning System and Heater
5 Point Seat Belts
Adjustable Seats for Driver and Commander
Floating Floor
Roof Hatches
Gun Ports and Vision Blocks
Towing Eye-Front and Rear
ARMATRONICS (Vehicle Electronics)
Driver's Vision Enhancement System
Driver Integrated Display
Blackout Lighting System, NATO Type Blackout System
Logging and Replay System (Video and Vehicle Data)
Embedded Diagnostics
Jump Start Socket
Fog Lights
Radio Provisions

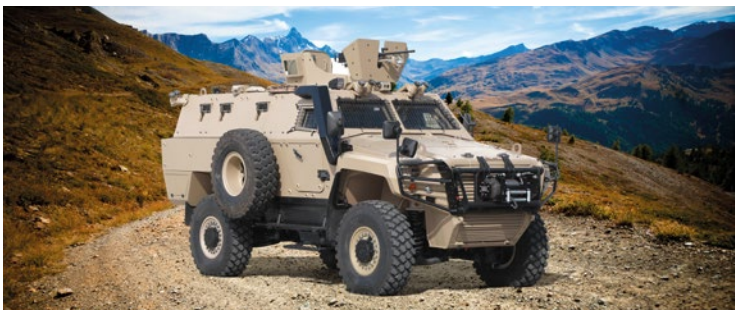
OPTIONS

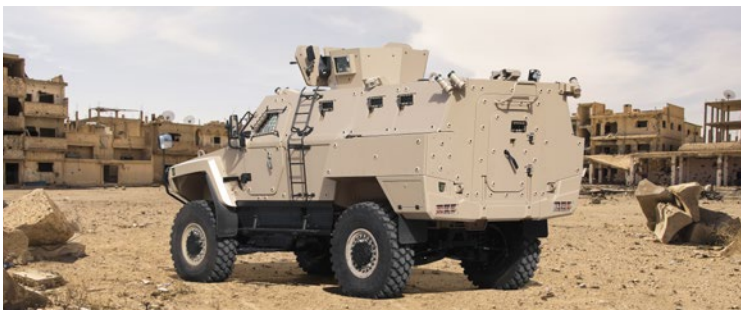
Winterization Kit
Self-Recovery Winch
CBRN Filtration System
Automatic Fire Extinguishing and Explosion Suppression System
Radio/Intercom System
Smoke Grenade Launchers
Auxiliary Power Unit
Situational Awareness System
Commander Integrated Display
Navigation System (GPS/INS)
Ramp Door with Emergency Exit
Barricade Remover



COBRA II - MRAP

MINE RESISTANT AMBUSH PROTECTED VEHICLE





Cobra II - MRAP is a next generation MRAP vehicle which unites high level of survivability and mobility in a modular package.

Cobra II - MRAP provides superior protection for the crew against ballistic, mine and IED threats while maintaining high cross-country mobility with its independent suspension system.

Cobra II - MRAP is specifically designed to provide high reliability, ease of maintenance and quick removal / installation of power pack.

The vehicle can be equipped with alternative power packs with up to 400 HP according to the required performance for the mission.

The vehicle provides high payload and spacious internal space for integration of weapon systems and mission equipment.

The vehicle mine protection is upgradeable and can meet very demanding levels of STANAG 4569.

Cobra II - MRAP can be configured with alternative seating layouts for up to 11 personnel with 3 or 5 door configurations as per specific user requirements.

COBRA II FAMILY

COBRA II - MRAP TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	19000 kg
Maximum Crew Capacity	Up to 11
Length	6700 mm (with self recovery winch)
Width	2850 mm (without spare tyre)
Height Over Hull	2650 mm
Ground Clearance	450 mm
ENGINE	Turbo Charged Diesel Engine 375 HP – 400 HP
TRANSMISSION	Automatic
TRANSFER CASE	2 speed with differential lock
AXLES	Differentials with lock and geared wheel hubs
SUSPENSION	Fully independent suspension with telescopic type hydraulic shock absorbers & helical springs
BRAKES	Pneumatic service brakes with discs on each wheel, dual circuit with ABS. Pneumatic independent park brake.
STEERING	Left Hand Drive, Hydraulic assisted.Optional Right Hand Drive.
TYRES	14.00 R20 with run-flat devices
ELECTRICAL SYSTEM	24 Volt system compliant with NATO military standards

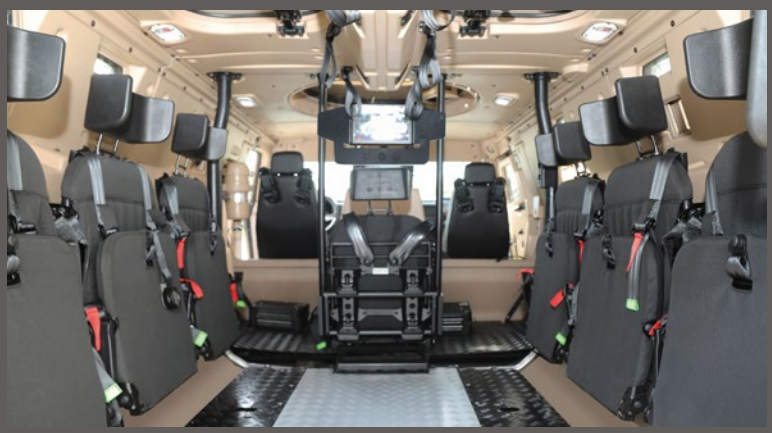
PERFORMANCE DATA	
Maximum Speed	105 km/h
Shallow Fording	1 m
Side Slope	30%
Gradeability	60%
Vertical Obstacle	0,6 m
Trench Crossing	1 m
Range	700 km

STANDARD FEATURES

Central Tyre Inflation System
Radial Tyres with Run Flat Inserts
Anti-Locking Brake System (ABS)
Ramp Door
Air Conditioning System/Heater
5 Point Seat Belts
Adjustable Seats for Driver and Commander
Floating Floor
Roof Hatches
Gun Ports and Vision Blocks
Towing Eye
ARMATRONICS (Vehicle Electronics)
Driver's Vision Enhancement System
Driver Integrated Display
Blackout Lighting System
Embedded Diagnostics
Jump Start Socket
Fog Lights
Glazing and Lights Protection Kit
Radio Provisions

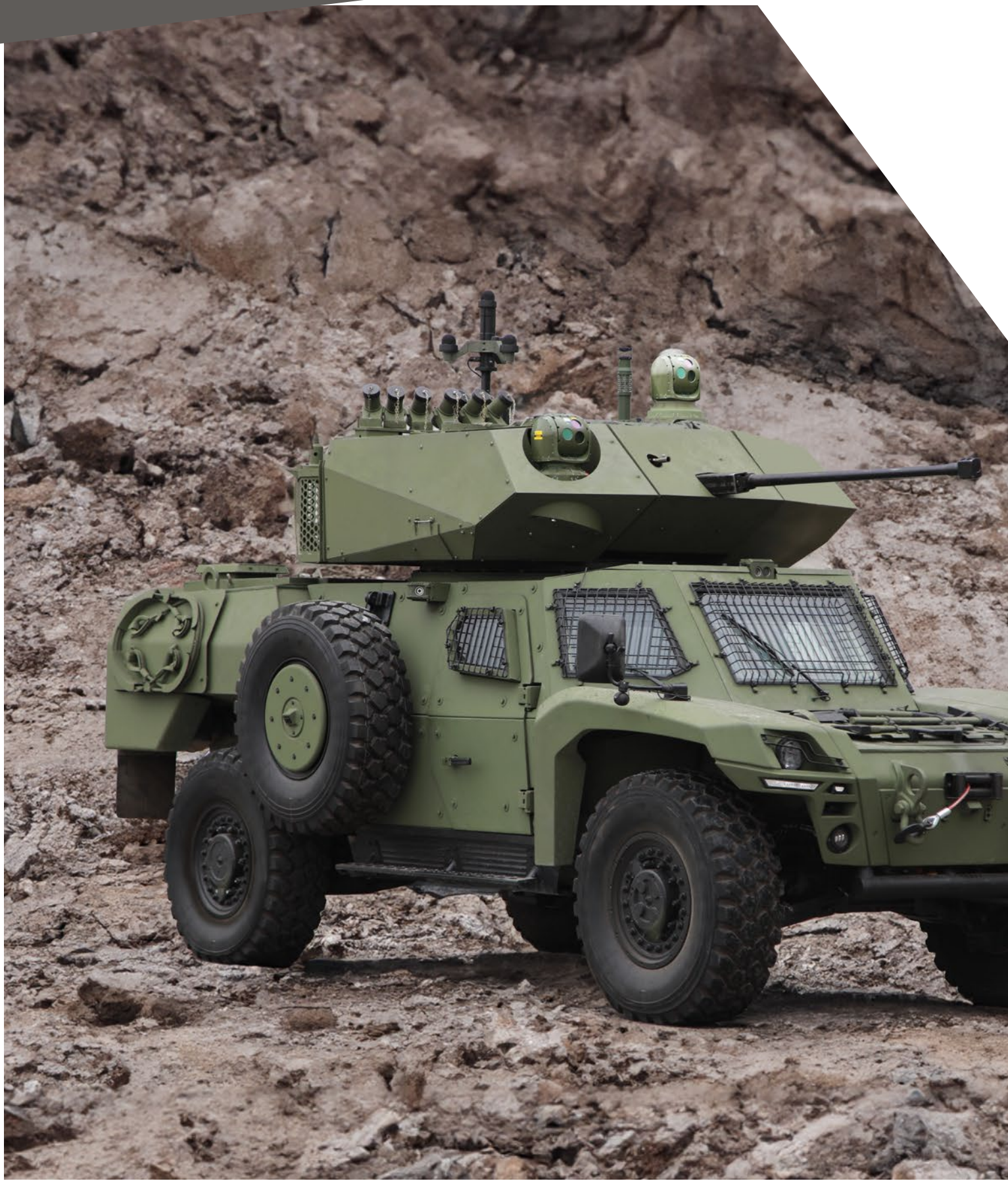
OPTIONS

Self-Recovery Winch
Spare Tyre
Mine Kit
RPG Protection Kit
CBRN Filtration System
Automatic Fire Extinguishing and Explosion Suppression System
Winterization Kit
Radio/Intercom System
Smoke Grenade Launchers
Auxiliary Power Unit
Logging and Replay System for Vehicle Data and Video
360 Degrees Situational Awareness System
Commander Integrated Display
Navigation System (GPS/INS)



AKREP II

ARMORED RECONNAISSANCE, SURVEILLANCE AND WEAPONS PLATFORM

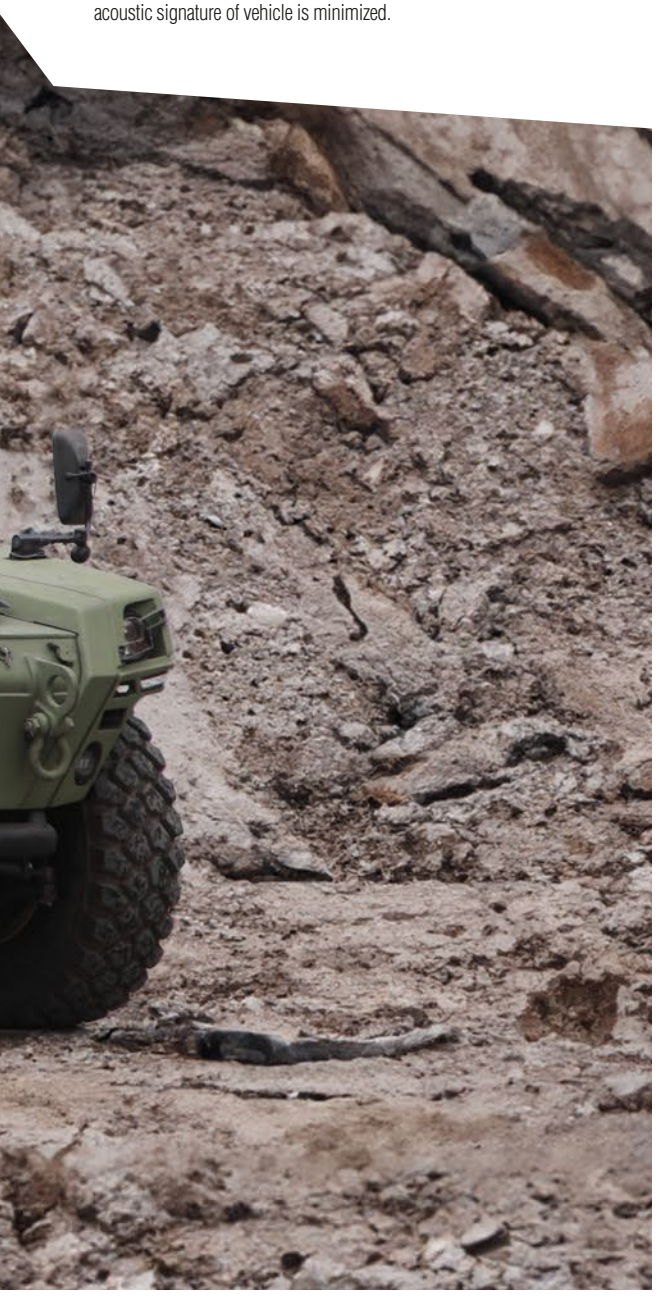


As a multi-role vehicle suitable for various mission types, AKREP II has the ability to provide effective firepower without compromising survivability. Medium caliber turrets up to 90 mm can be integrated. AKREP II can also be configured for; weapon platform for quick reaction, surveillance missions, armed reconnaissance, air defense missions, forward observer and other similar tasks.

AKREP II's four-wheel drive system and steerable rear axle (optional) give the vehicle excellent maneuverability. Relying on the four-wheel independent suspension and swift torque control of the power pack, AKREP II can travel cross-country over challenging terrain and traverse deep mud, snow or water with equal ease. Maneuverability of AKREP II is crowned by crab steering motion which comes with its steerable rear axle.

AKREP II controls the basic mechanical components of steering, acceleration and deceleration electrically (drive-by-wire). This makes possible to remote control of the vehicle or adapt the driving assistance systems and autonomous capabilities.

AKREP II has the advantage of a reduced silhouette. AKREP II can be equipped with alternative power sources, diesel, hybrid and electric. AKREP II serves low silhouette, high mine protection and efficient fire power on the same platform. With the help of electric and hybrid drive, thermal and acoustic signature of vehicle is minimized.



AKREP II TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS

Gross Vehicle Weight	Up to 15500 kg
Maximum Crew Capacity	3 (Driver,commander and gunner)
Length	5900 mm
Width	2500 mm
Height Over Hull	1975 mm
Ground Clearance	400 mm
Vertical Obstacle	500 mm
Fording	1000 mm
Turning Radius	8 m (6 m with rear axle steering)
ENGINE	Diesel (360 HP, turbo intercooler), Electric (2 x 180 kW), Hybrid
TRANSMISSION	Automatic 6 speed (for diesel version)
AXLES	With differential lock
SUSPENSION	Full independent suspension system with coil springs
BRAKES	Disc brakes with ABS
STEERING	Hydraulic (Rear axle steering and crab motion capability optional)
TYRES	395/85R20 with run-flat system
ELECTRIC SYSTEM	24 VDC AGM Batteries
	For electric drive system high voltage Li-Ion Batteries

PERFORMANCE DATA

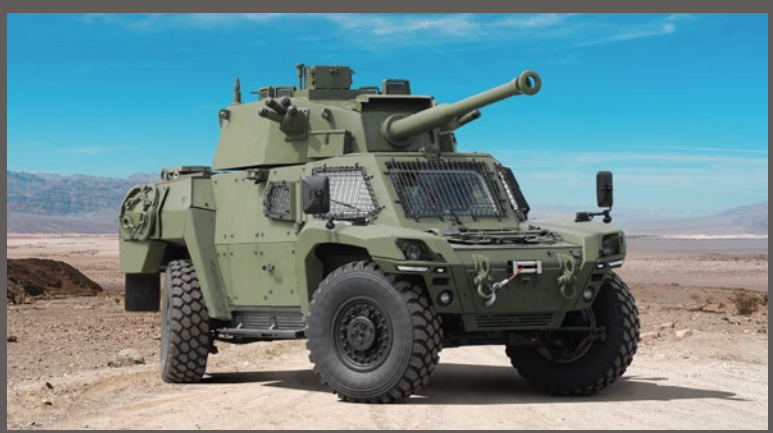
Maximum Speed	110 km/h
Side Slope	40%
Gradeability	60%
Angle of Approach	55°
Angle of Departure	40°

STANDARD FEATURES

Central Tyre Inflation System (CTIS)
Radial Tyres with Run Flat Inserts
Anti-Locking Brake System (ABS)
Air Conditioning System and Heater
5 Point Seat Belts and Floating Floor
Towing Eye, front and rear
Driver's Vision Enhancement System
Built in Diagnostics
Blackout Lighting System
LED Lighting

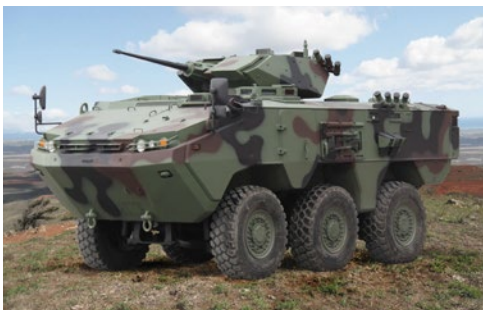
OPTIONS

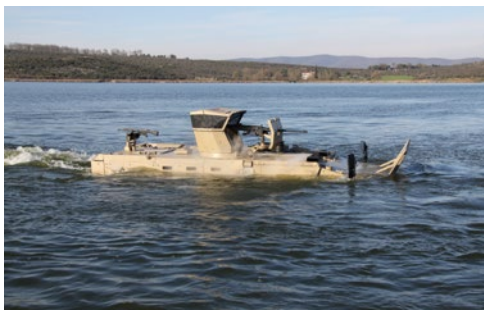
Drive-by-wire
CBRN Filtration System
Self Recovery Winch
360° Situational Awareness System
Radio/Intercom System
Smoke Grenade Launchers
Mirror Cameras
Automatic Fire Extinguishing / Explosion Suppression System
Commander Integrated Display (Depending on Vehicle Mission)
Navigation System (GPS/INS)
Rear Axle Steering and Crab Motion Capability
BMS (With Command Post Vehicle)
Spare Wheel



ARMA 6x6

WHEELED ARMORED VEHICLE





ARMA is a new generation modular multi-wheeled armored vehicle with superior tactical and technical features.

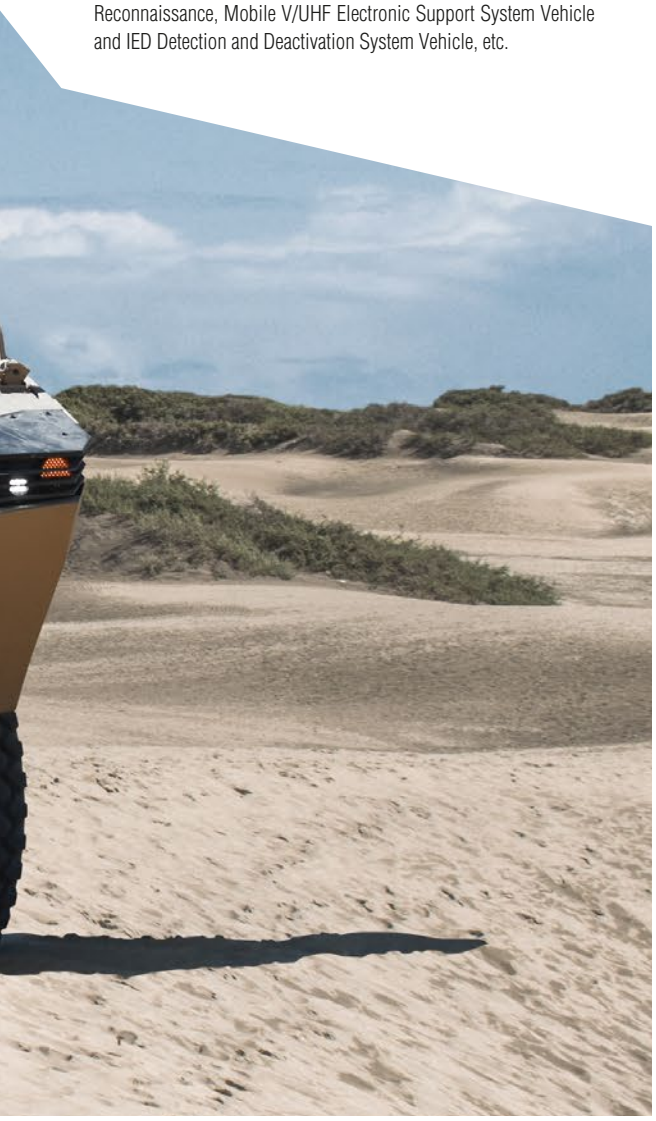
The modular and highly protected hull design of ARMA 6x6 provides a multipurpose platform that enables seamless integration of various types of mission equipment and/or weapon systems which meet the needs of modern armies in combat and peace keeping operations.

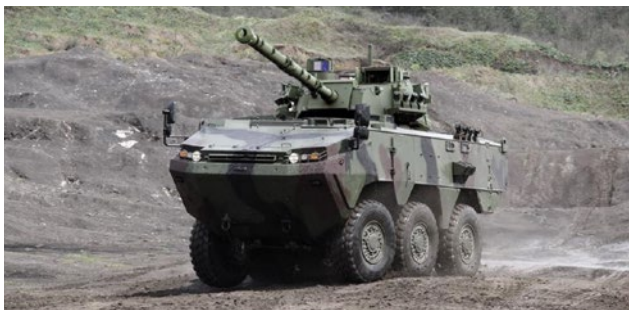
ARMA, being an agile and highly maneuverable platform, can be operated over long distances in a wide range of challenging terrains from deserts to arctic conditions.

Multipurpose Platform

ARMA is designed to meet specific requirements of various customers in modern combat, peace keeping and humanitarian relief operations.

ARMA is available in various types of mission configurations such as Armored Personnel Carrier, Infantry Fighting Vehicle, Command Post, Ambulance, CBRN Reconnaissance, Driver Training, Reconnaissance, Mobile V/UHF Electronic Support System Vehicle and IED Detection and Deactivation System Vehicle, etc.





ARMA 6x6 TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	Up to 23000 kg
Maximum Crew Capacity	Up to 10, including driver and commander
Length	7000 mm
Width	2750 mm
Height Over Hull	2460 mm
Ground Clearance	420 mm
ENGINE	Turbo charged diesel engine 450 HP
TRANSMISSION	Automatic
TRANSFER CASE	Single speed with differential lock
AXLES	Differentials with lock and geared wheel hubs
SUSPENSION	Fully independent suspension with hydro-pneumatic struts on each wheel or Fully independent suspension with telescopic type shock absorber & helical spring
BRAKES	Pneumatic service brakes with discs on each wheel, dual circuit with ABS Pneumatic independent park brake system
STEERING	Power assisted, steerable 1st and 2nd axles
TYRES	14.00 R20 with run-flat system
ELECTRICAL SYSTEM	24 V, 12 V, 120 Ah Maintenance-free Batteries, 28 V Alternator

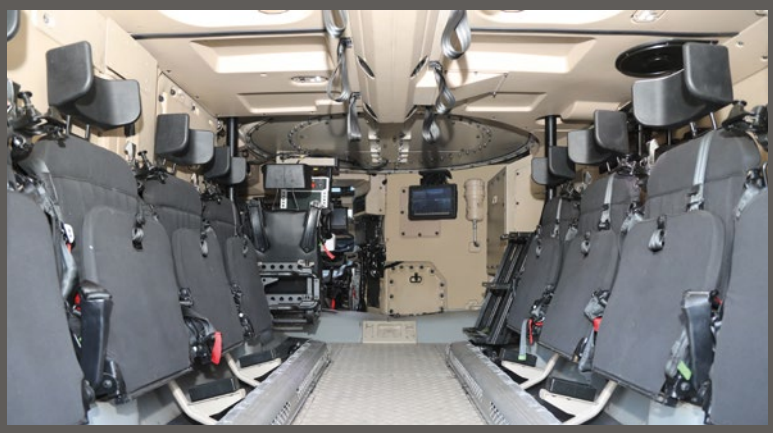
PERFORMANCE DATA	
Maximum Speed	> 105 km/h
Swimming Speed (Amphibious version)	> 9 km/h
Fording Depth	1500 mm
Side Slope	30%
Gradeability	60%
Vertical Obstacle	600 mm
Trench Crossing	1200 mm
Angle of Approach	42°
Angle of Departure	42°
Range	700 km

STANDARD FEATURES

Central Tyre Inflation System
Radial Tyres with Run Flat Inserts
Anti-Locking Brake System (ABS)
Air Conditioning System/Heater
5 Point Seat Belts
Adjustable Seats for Driver and Commander
Floating Floor
Side Door
Roof Hatches
Gun Ports and Vision Blocks
Towing Eye
ARMATRONICS (Vehicle Electronics)
Driver's Vision Enhancement System
Driver Integrated Display
Blackout Lighting System, NATO Type Blackout System
Logging and Replay System (Video and Vehicle Data)
Embedded Diagnostics
Jump Start Socket
Fog Lights
Radio Provisions

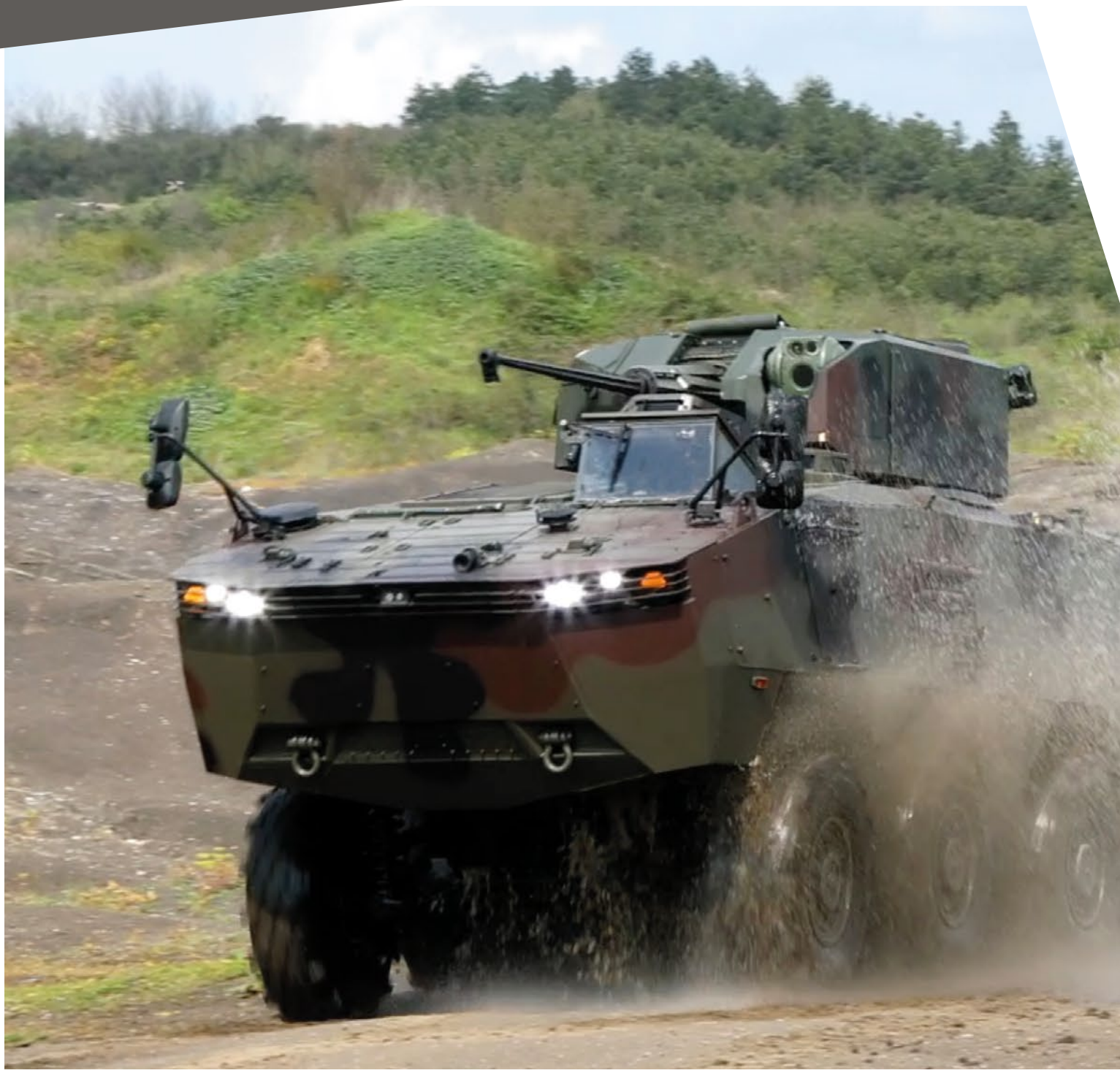
OPTIONS

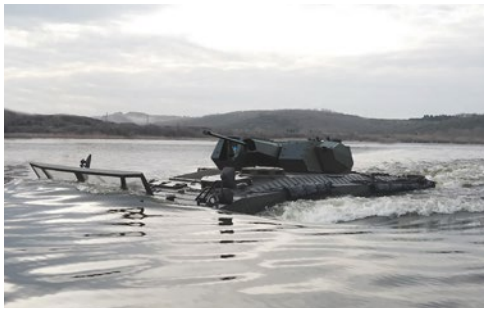
Amphibious Capability
Winterization Kit
Self-Recovery Winch
CBRN Filtration System
Automatic Fire Extinguishing and Explosion Suppression System
Radio/Intercom System
Smoke Grenade Launchers
Auxiliary Power Unit
Situational Awareness System
Commander Integrated Display
Navigation System (GPS/INS)
Ramp Door with Emergency Exit
Barricade Remover



ARMA 8x8

WHEELED ARMORED VEHICLE





ARMA is a new generation modular multi-wheeled armored vehicle with superior tactical and technical features.

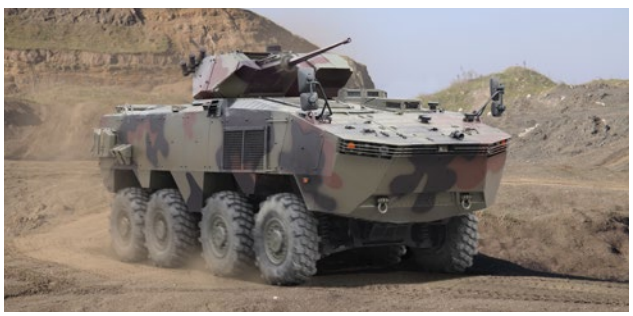
The modular and highly protected hull design of ARMA 8x8 provides a multipurpose platform that enables seamless integration of various types of mission equipment and/or weapon systems which meet the needs of modern armies in combat and peace keeping operations.

ARMA, being an agile and highly maneuverable platform, can be operated over long distances in a wide range of challenging terrains from deserts to arctic conditions.

Modularity for Various Missions

ARMA is designed to meet specific requirements of various customers in modern combat, peace keeping and humanitarian relief operations.

ARMA is available in various types of mission configurations such as Armored Personnel Carrier, Infantry Fighting Vehicle, Mobile Gun System, Mortar Carrier, Command Post, Ambulance, CBRN Reconnaissance, Driver Training, Reconnaissance, Maintenance, Recovery, Mine and IED Detection System, etc.



ARMA 8x8 TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	Up to 40000 kg
Maximum Crew Capacity	Up to 12, including driver and commander
Length	8000 mm
Width	3000 mm
Height Over Hull	2460 mm
Ground Clearance	450 mm
ENGINE	Turbo charged diesel engine Up to 720 HP
TRANSMISSION	Automatic
TRANSFER CASE	Two speed with longitudinal lock
AXLES	Differentials with lock and geared wheel hubs
SUSPENSION	Fully Independent suspension with hydro-pneumatic struts on each wheel or Fully independent suspension with telescopic type shock absorber & helical spring
BRAKES	Pneumatic service brakes with discs on each wheel, dual circuit with ABS Pneumatic independent park brake system
STEERING	Power assisted, steerable 1st and 2nd axles
TYRES	14.00 R20 or 16.00 R20 with run-flat system
ELECTRICAL SYSTEM	24 V, 12 V, 120 Ah Maintenance-free Batteries, 28 V Alternator

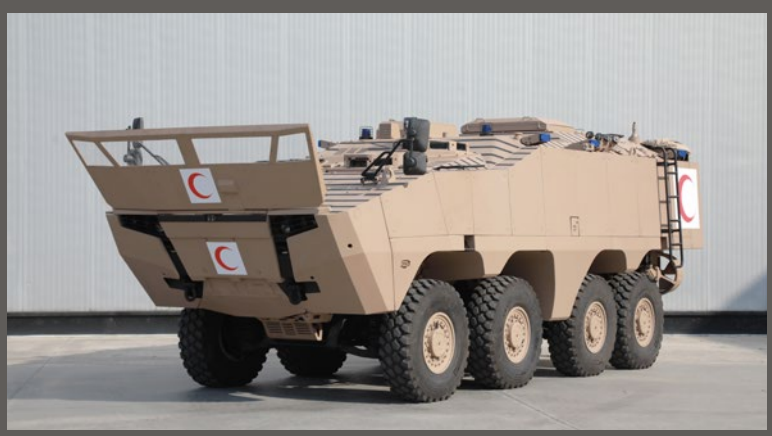
PERFORMANCE DATA	
Maximum Speed	>100 km/h
Swimming Speed (Amphibious version)	> 9 km/h
Fording Depth	1800 mm
Side Slope	30%
Gradeability	60%
Vertical Obstacle	700 mm
Trench Crossing	2000 mm
Angle of Approach	45°
Angle of Departure	45°
Range	700 km

STANDARD FEATURES

Central Tyre Inflation System
Radial Tyres with Run Flat Inserts
Anti-Locking Brake System (ABS)
Air Conditioning System/Heater
Ramp Door with Emergency Exit
5 Point Seat Belts
Adjustable Seats for Driver and Commander
Floating Floor
Roof Hatches
Towing Eye
ARMATRONICS (Vehicle Electronics)
Driver's Vision Enhancement System
Driver Integrated Display
Blackout Lighting System, NATO Type Blackout System
Logging and Replay System (Video and Vehicle Data)
Embedded Diagnostics
Jump Start Socket
Fog Lights
Radio Provisions

OPTIONS

Amphibious Capability
Winterization Kit
Self-Recovery Winch
CBRN Filtration System
Automatic Fire Extinguishing and Explosion Suppression System
Radio/Intercom System
Smoke Grenade Launchers
Auxiliary Power Unit
Situational Awareness System
Commander Integrated Display
Navigation System (GPS/INS)
Ramp Door with Emergency Exit
Barricade Remover
Gun Ports and Vision Blocks
All Wheel Steering Systems



ARMA II 8x8

WHEELED ARMORED VEHICLE

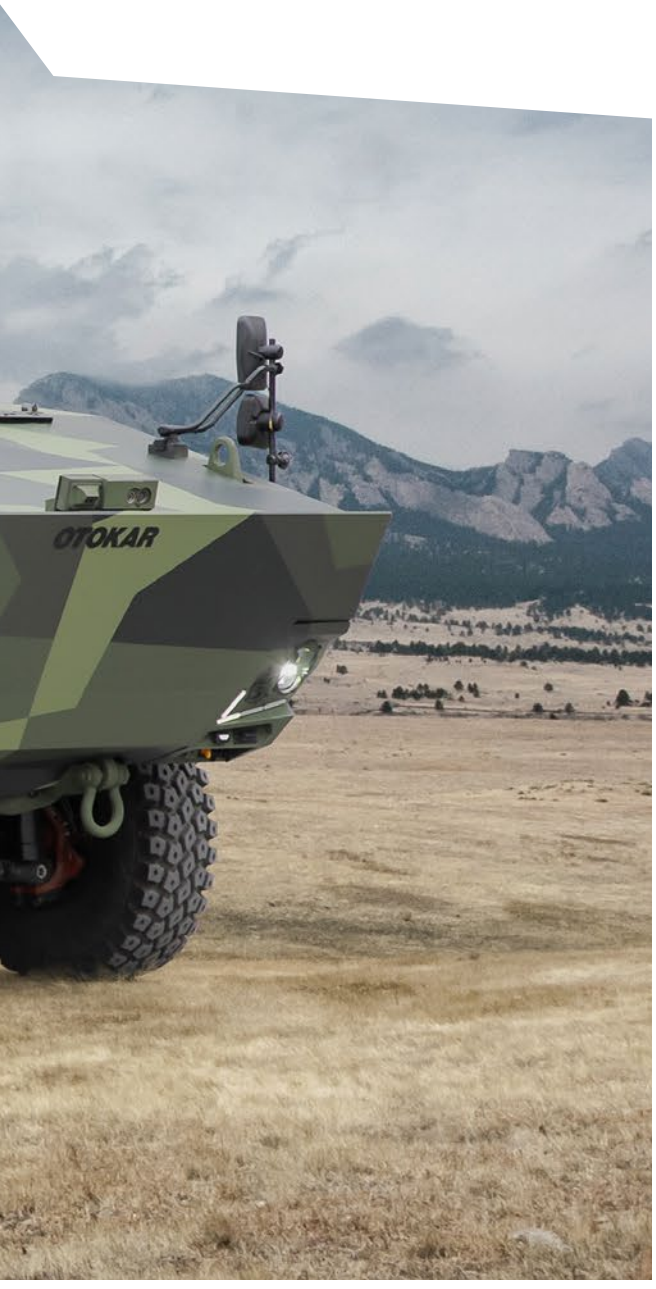
Arma II is the new member of Arma multi-wheeled armored family, which is actively in service different terrain and climate conditions of the world.

Arma II is a new generation armored vehicle that stands out with its superior terrain capability and modular structure, while offering the highest level of protection and the highest fire power in its class.

Arma II 8x8 is available in various types of mission, configurations such as Armored Personnel Carrier, Fire Support Vehicle with 105 and 120 mm Turret, 120 mm Mortar Carrier, Low and Medium Altitude Defense Vehicle, Combat Support Vehicle, Infantry Fighting Vehicle with 25 mm One Man Turret and 30 mm Weapon System, Recovery Vehicle, CNRN Reconnaissance, Reconnaissance, Driver Training, Ambulance, Command, Control and etc.

The independent suspension system enhanced with Run Flat Tires, built-in Central Tyres Inflation System (CTIS), and Anti-locking Brake System (ABS) and independent hydro-pneumatic suspension ground mobility and ride comfort even over the roughest terrain.

Vehicle's mobility is further enhanced with longitudinal and transverse differential locks and the high power to weight ratio coupled with high ground clearance and approach/departure angles.



ARMA II 8x8 TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS

Gross Vehicle Weight	Up to 40,000 kg
Maximum Crew Capacity	Up to 12, including driver and commander
Length	8.50 m
Width	3.40 m
Highth Over Hull	2.50 m
Ground Clearance	45 cm
ENGINE	Turbo charged diesel engine 720 BG - 2700 Nm
TRANSMISSION	Automated 6 forward, 1 reverse
TRANSFER CASE	Two speed with longitudinal lock
AXLES	Differentials with lock and geared wheel hubs
SUSPANSION	Fully Independent suspension with hydro-pneumatic struts on each wheel
BRAKES	Pneumatic service brakes with discs on each wheel, dual circuit with ABS Pneumatic independent park brake system
STEERING	Power assisted, steerable all axles
TYRES	16.00 R 20 with run-flat system
ELECTRICAL SYSTEM	24 V, 12 V 120 Ah Maintenance-free Batteries, 28 V alternator

PERFORMANCE DATA

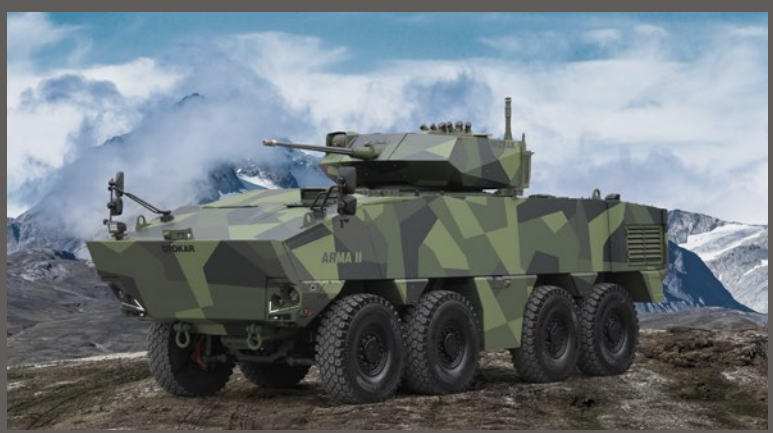
Maximum Speed	> 105 km/h
Fording Dept	120 cm
Side Slop	40%
Gradeability	70%
Vertical Obstacle	70 cm
Trench Crossing	210 cm
Angle of Apprach	45°
Angle of Departure	45°
Range	700 km

STANDARD FEATURES

Central Tyre Inflation System (CTIS)
Anti-Locking Brake System (ABS)
5 Point Seat Belts
Floating Floor
Towing Eye
Automatic Fire Extinguishing and Explosion Suppression System
Driver's Vision Enhancement System
Situational Awareness System
Blackout Lighting System,
NATO Type Blackout System
Embedded Diagnostics Ramp Door
Fog Lights
Radio Provisions

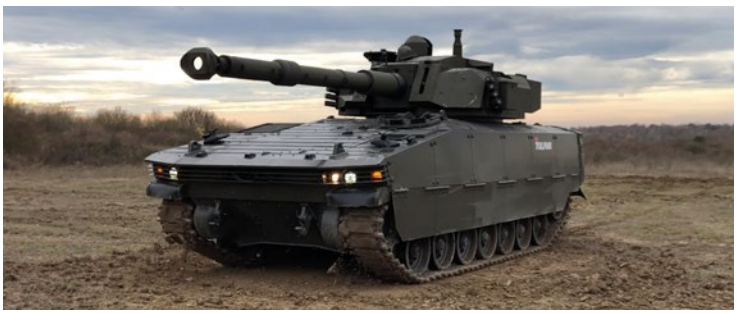
OPTIONS

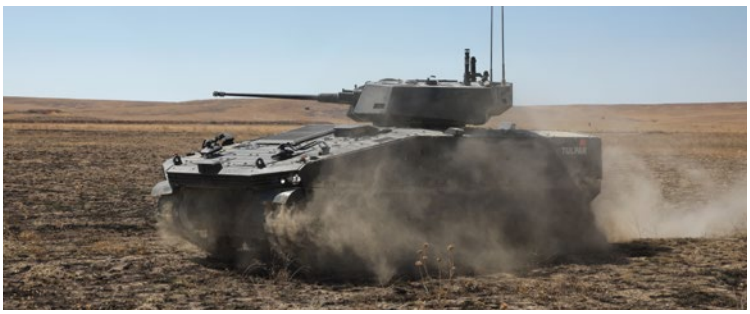
Winterization Kit
Self-Recovery Winch
CBRN Filtration System
Radio/Intercom System
Smoke Grenade Launchers
Auxiliary Power Unit
Commander Integrated Display
GPS/INS



TULPAR

MODULAR ARMORED TRACKED VEHICLE

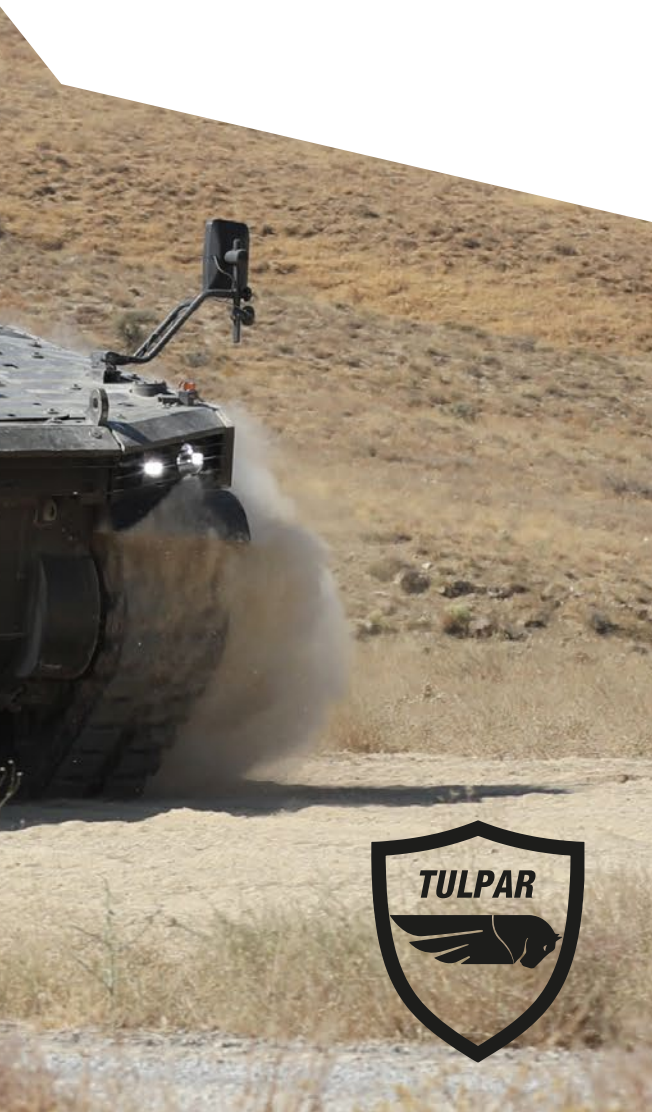




TULPAR is designed as a multi-purpose vehicle with variants ranging from 28000 kg to 45000 kg to fully satisfy the future global requirements. Future-oriented perspective of modularity is to increase operational flexibility by using common components and a common chassis over wide range of vehicle variants. TULPAR comes in several variants that share common subsystems.

The common platform can accommodate a light tank; infantry fighting vehicle; armored personnel carrier; reconnaissance vehicle; command and control vehicle; air defence; ambulance; repair and recovery vehicle; mortar vehicle and other vehicle variants. Common platform design approach provides significant logistics advantages as well as reducing training burdens.

TULPAR is a multipurpose platform with high fire power, modularity and growth potential that can be tailored to meet current and future operational requirements.



TULPAR TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS

Gross Vehicle Weight	28000 kg to 45000 kg
Maximum Crew Capacity	Up to 12, driver, commander, gunner and 9 troops
Length	7200 mm
Width	3450 mm
Height Over Hull	2100 mm
Ground Clearance	450 mm
ENGINE	Turbo Charged Diesel Engine
	700 HP to 1100 HP
TRANSMISSION	Automatic
SUSPENSION	Torsion Bars with Shock Absorbers
	Automatic Track Tension System
TRACK SYSTEM	Rubber Type Track or Steel Type Track with Replaceable Pads
ELECTRICAL SYSTEM	24 V, 12 V, 120 Ah Maintenance-free Batteries, 28 V Alternator

PERFORMANCE DATA

Maximum Speed	≥70 km/h
Fording Depth	1500 mm
Side Slope	40%
Gradeability	60%
Vertical Obstacle	1000 mm
Trench Crossing	2600 mm
Range	≥500 km

STANDARD FEATURES

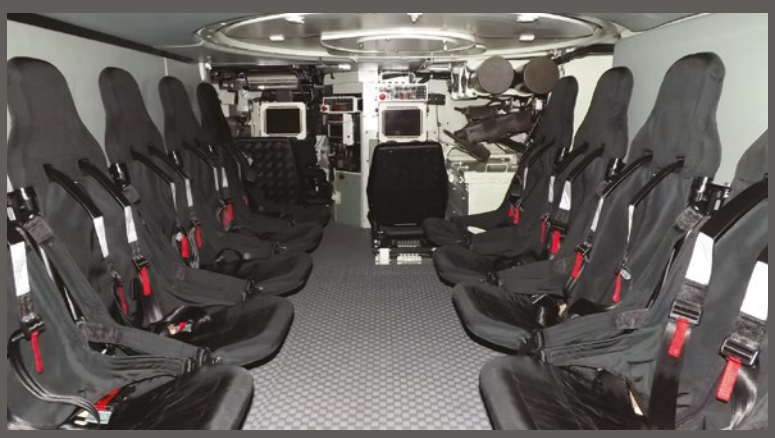
Life Support System Combining CBRN Protection and Air Conditioning
Automatic Fire Extinguishing and Explosion Suppression System
Automatic Track Tension System
Mine Resistant Crew Seats
ARMATRONICS (Vehicle Electronics)
Driver Integrated Display
Driver's Vision Enhancement System
Built in Diagnostic

OPTIONS

Pre Heating System
Command, Control, Communication and Information (C3I)
Situational Awareness System
Radio and Intercommunication System
Auxiliary Power Unit
Commander Integrated Display
Navigation System (GPS/INS)

VARIANTS

Light Tank
Infantry Fighting Vehicle
Armored Personnel Carrier
Reconnaissance Vehicle
Command and Control Vehicle
Air Defence Vehicle
Ambulance
Repair and Recovery Vehicle
Mortar Vehicle



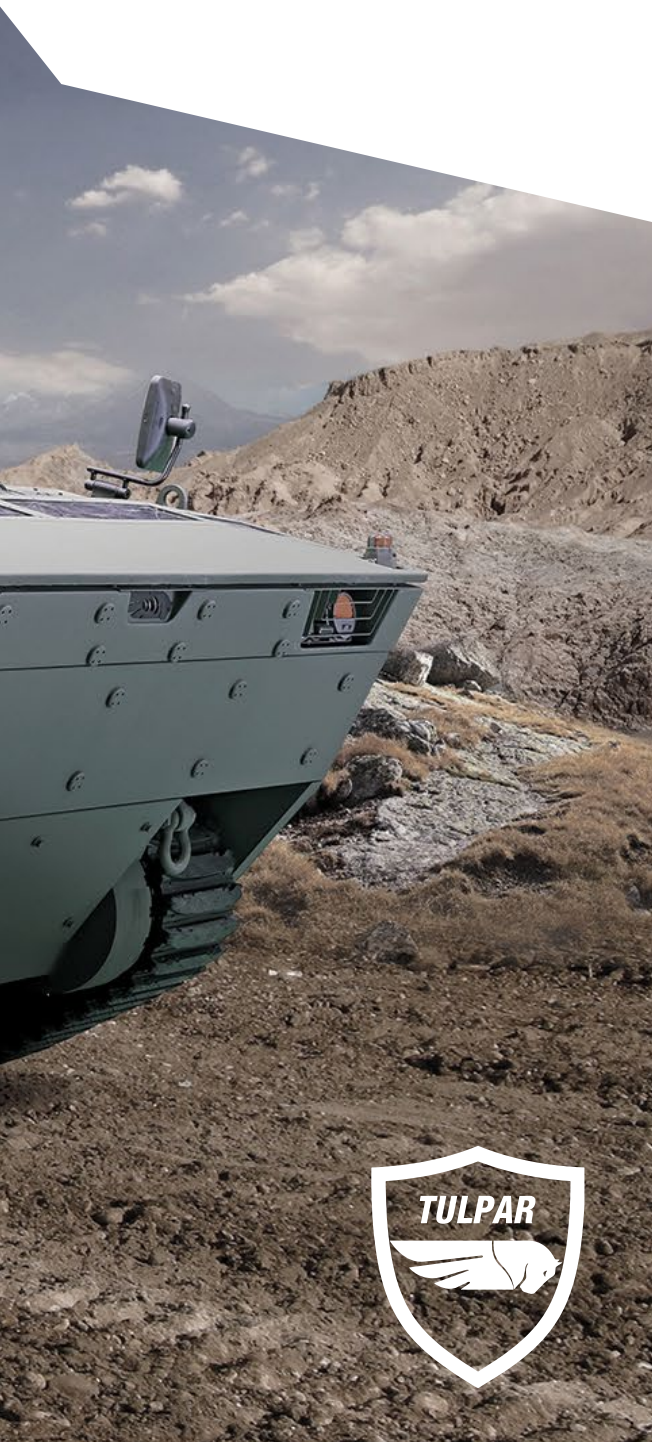
TULPAR - S

AMPHIBIOUS ARMORED TRACKED VEHICLE

TULPAR-S is designed as an amphibious light tracked vehicle offering a common platform for mission specific variants.

Common platform design approach provides significant tactical and logistics advantages as well as reducing training burdens.

TULPAR-S can be tailored for high density combat, stabilization operations, peacekeeping missions, and disaster relief missions to list a few.



TULPAR - S TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS

Gross Vehicle Weight	Up to 17000 kg
Maximum Crew Capacity	Up to 10, driver, commander, and 8 troops
Length	5700 mm
Width	2900 mm
Height Over Hull	2100 mm
Ground Clearance	450 mm
ENGINE	Turbo Charged Diesel Engine
	360 HP
TRANSMISSION	Automatic
SUSPENSION	Torsion Bars with Shock Absorbers
	Automatic Track Tension System
TRACK SYSTEM	Rubber Type Track or Steel Type Track with Replaceable Pads
ELECTRICAL SYSTEM	24 V, 12 V 120 Ah Maintenance-free Batteries, 28 V Alternator

PERFORMANCE DATA

Maximum Speed	≥70 km/h
Swimming Speed	8 km/h
Side Slope	40%
Gradeability	60%
Vertical Obstacle	700 mm
Trench Crossing	1800 mm
Range	≥500 km

STANDARD FEATURES

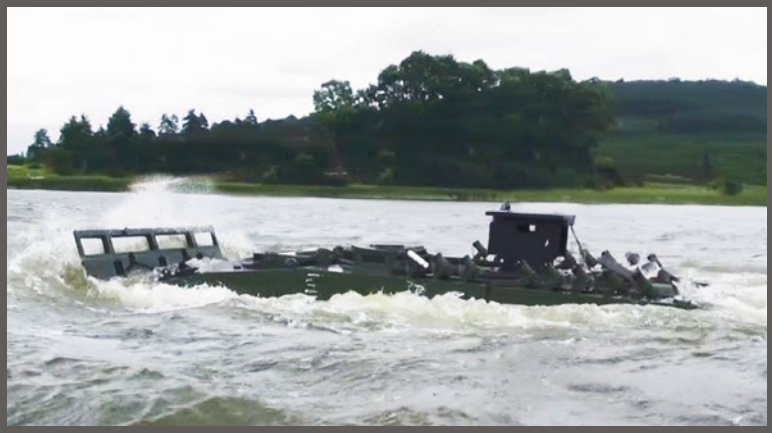
Life Support System Combining CBRN Protection and Air Conditioning
Automatic Fire Extinguishing and Explosion Suppression System
Automatic Track Tension System
Mine Resistant Crew Seats
ARMATRONICS (Vehicle Electronics)
Driver Integrated Display
Driver's Vision Enhancement System
Built in Diagnostic

OPTIONS

Pre Heating System
Command, Control, Communication and Information (C3I)
Situational Awareness System
Radio and Intercommunication System
Auxiliary Power Unit
Commander Integrated Display
Navigation System (GPS/INS)

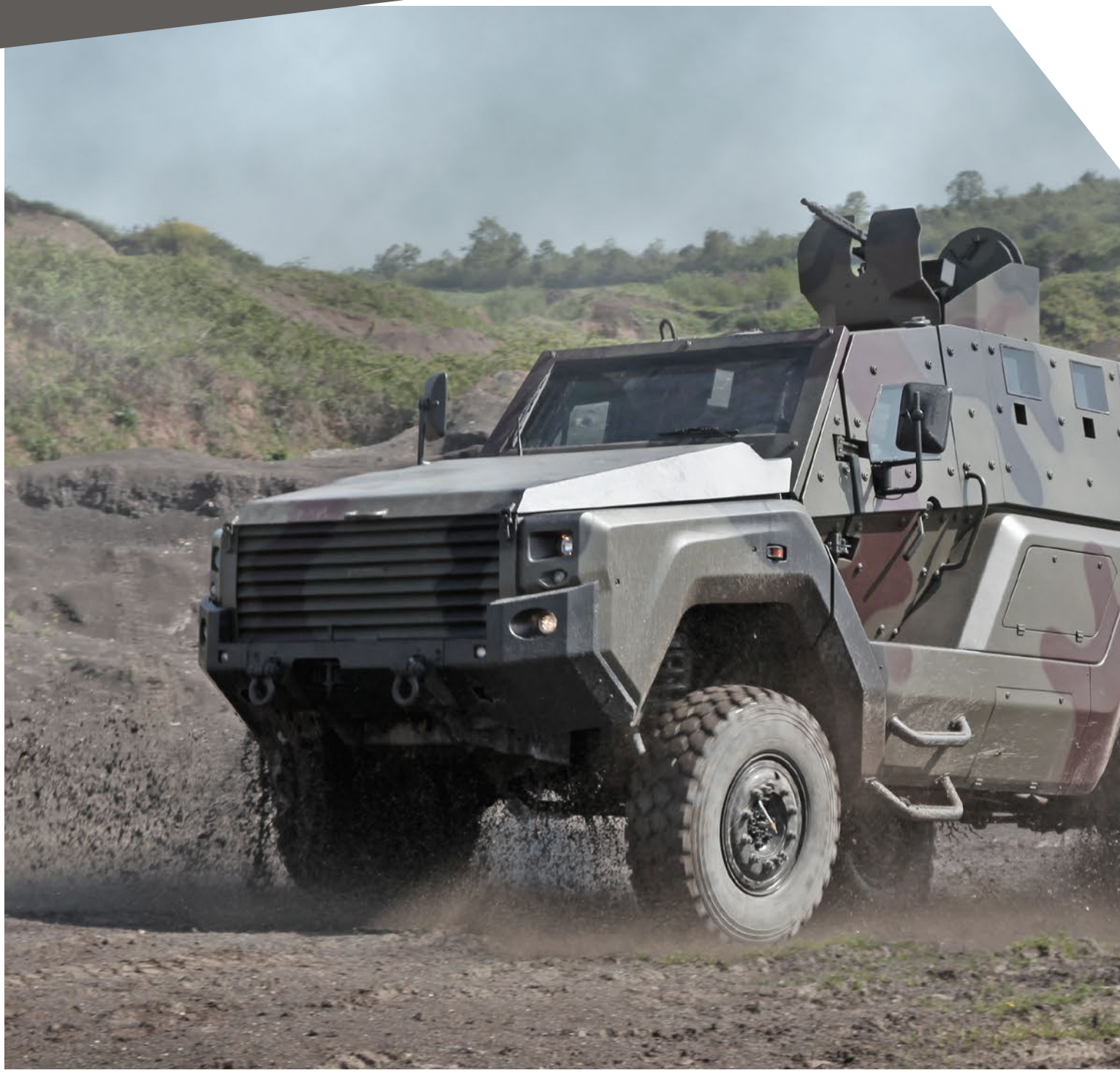
VEHICLE VARIANTS

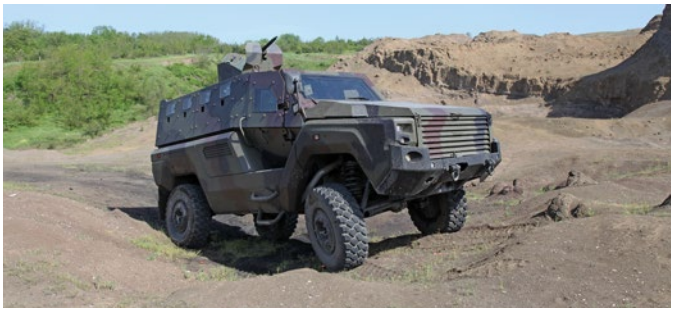
Infantry Fighting Vehicle
Armored Personnel Carrier
Armored Weapon Carrier
Maintenance and Recovery Vehicle
Command and Control
Ambulance
Reconnaissance Vehicle



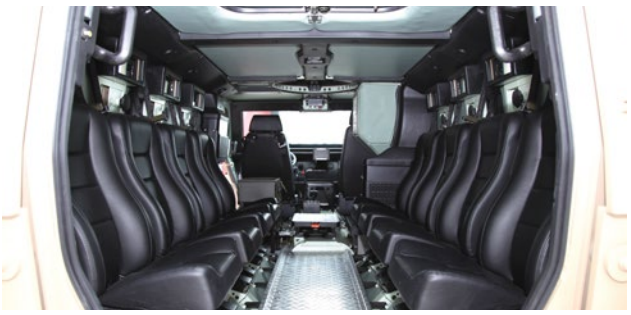
KAYA

MINE RESISTANT PERSONNEL CARRIER





KAYA is specially designed and developed as a Mine Resistant Ambush Protected Personnel Carrier based on torsionally flexible chassis. KAYA provides enhanced mine and ballistic protection along with superior mobility in a wide range of demanding terrains under diverse climatic conditions. Single cabin monocoque body of KAYA carries up to ten troops including the driver and commander.



KAYA TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	Up to 14500 kg
Maximum Crew Capacity	Up to 10, including driver and commander
Length	6450 mm
Width	2560 mm
Height Over Hull	2650 mm
Ground Clearance	490 mm
CHASSIS	Mercedes Unimog FGA 14.5 Special Purpose
ENGINE	Mercedes, Turbo charged diesel engine 302 HP
TRANSMISSION	Automatic
TRANSFER CASE	Two speed with high and low ranges
AXLES	Permanent All-Wheel drive (4x4) Portal axles with hub reduction gears differential locks engageable during driving, inter-axle locks and transverse locks
SUSPENSION	Progressive coil springs, telescopic shock-absorbers and stabilisers front and rear
BRAKES	Service Brake: Air brake twin circuit disc brakes with 4-channel ABS Parking Brake + 4 Wheel Lock: Spring brake system acting on the rear wheel brake discs Engine Brake: 2-stage, actuated pneumatically by multiple function levers at the steering column with exhaust flap and constant throttle
STEERING	Hydraulic power-assisted steering
TYRES	395/85/R20 with run-flat system
ELECTRICAL SYSTEM	24 V, 12 V, 120 Ah Maintenance-free Batteries, 28 V Alternator

PERFORMANCE DATA	
Maximum Speed	95 km/h
Fording Depth	1200 mm
Side Slope	30%
Gradeability	60%
Vertical Obstacle	500 mm
Trench Crossing	1000 mm
Angle of Approach	40° (w/o winch)
Angle of Departure	48°
Range	700 km

STANDARD FEATURES

Central Tyre Inflation System (CTIS)
Radial Tyres with Run Flat Inserts
Anti-Locking Brake System (ABS)
Hill Start Assist
Air Conditioning System/Heater
5 Point Seat Belts
Floating Floor
Roof Hatches
Gun Ports and Vision Blocks
Towing Eye
Blackout Lighting System, NATO Type Blackout System
Jump Start Socket
Fog Lights
Radio Provisions
Ramp Door

OPTIONS

Winterization Kit
Driver's Vision Enhancement System
CBRN Filtration System
Automatic Fire Extinguishing and Explosion Suppression System
Radio/Intercom System
Smoke Grenade Launchers
360° Situational Awareness System
Navigation System (GPS/INS)
Self Recovery Winch
Search Light

ALPAR

UNMANNED GROUND VEHICLE

ALPAR was developed as an unmanned platform that can perform tasks together with manned and unmanned elements in the battlefield to meet the robotic and unmanned ground vehicle requirements of the armed forces. ALPAR offers new capabilities and empowers the commanders in the field in planning and execution of combat power in the most effective way in tactical operations.

Single Platform for Different Missions

ALPAR's series hybrid-electric drive infrastructure empowers the following features:

- Co-operating as the lead or wing member with manned vehicles and/or infantry,
- Conducting surveillance and reconnaissance missions with on board UAV's and UGV's,
- Suppressing enemy/terrorist positions with fire
- Neutralizing facilities such as shelters/buildings and enemy vehicles with the main gun or guided missiles
- Serving as a direct fire and fire support element
- Execution of reconnaissance and surveillance missions
- Autonomous missions such as patrol, border surveillance, mini-UGV carrier (marsupial concept), drone carrier, etc.
- Target detection and logistic support activities
- Loitering Munition Carrier, autonomous re-supply vehicle, C-UAS, EW missions.

ALPAR TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS	
Gross Vehicle Weight	15000 kg
Length	6250 mm
Width	2750 mm
Platform Height	1500 mm
Ground Clearence	450 mm
POWER PACK	Series Hybrid with Diesel Range Extender
SUSPENSION	Torsion bar with hydraulic dampers
	Automatic Track Tensioning System
ELECTRIC SYSTEM	Low Voltage: 24 VDC AGM Battery
	High Voltage: 750 VDC Li-Ion Battery

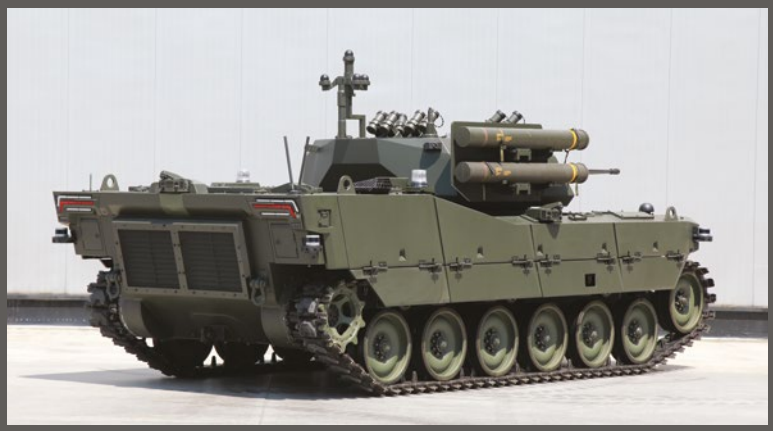
PERFORMANCE DATA	
Maximum Speed	> 70 km/h
Side Slope	30%
Gradeability	60%
Vertical Obstacle	700 mm
Trench Crossing	1800 mm
Range	500 km

Autonomous and Remote Controlled Driving Capabilities

360° situational awareness
Up to 5 km of use with MIMO Radio (LOS and NLOS)
AES128/256 encryption
Advanced remote control and connectivity with satellite communication (BLOS)
Route determination in GNSS denied environment
Waypoint navigation and patrol duties
Platooning and follow–me function for convoy missions
Communication with other unmanned assets (UAV, USV, etc.)
Return home function
2D and 3D LIDAR mapping
Obstacle detection and re-routing
Identification Friend or Foe (IFF)
Advanced Driver Assistance Systems (ADAS)

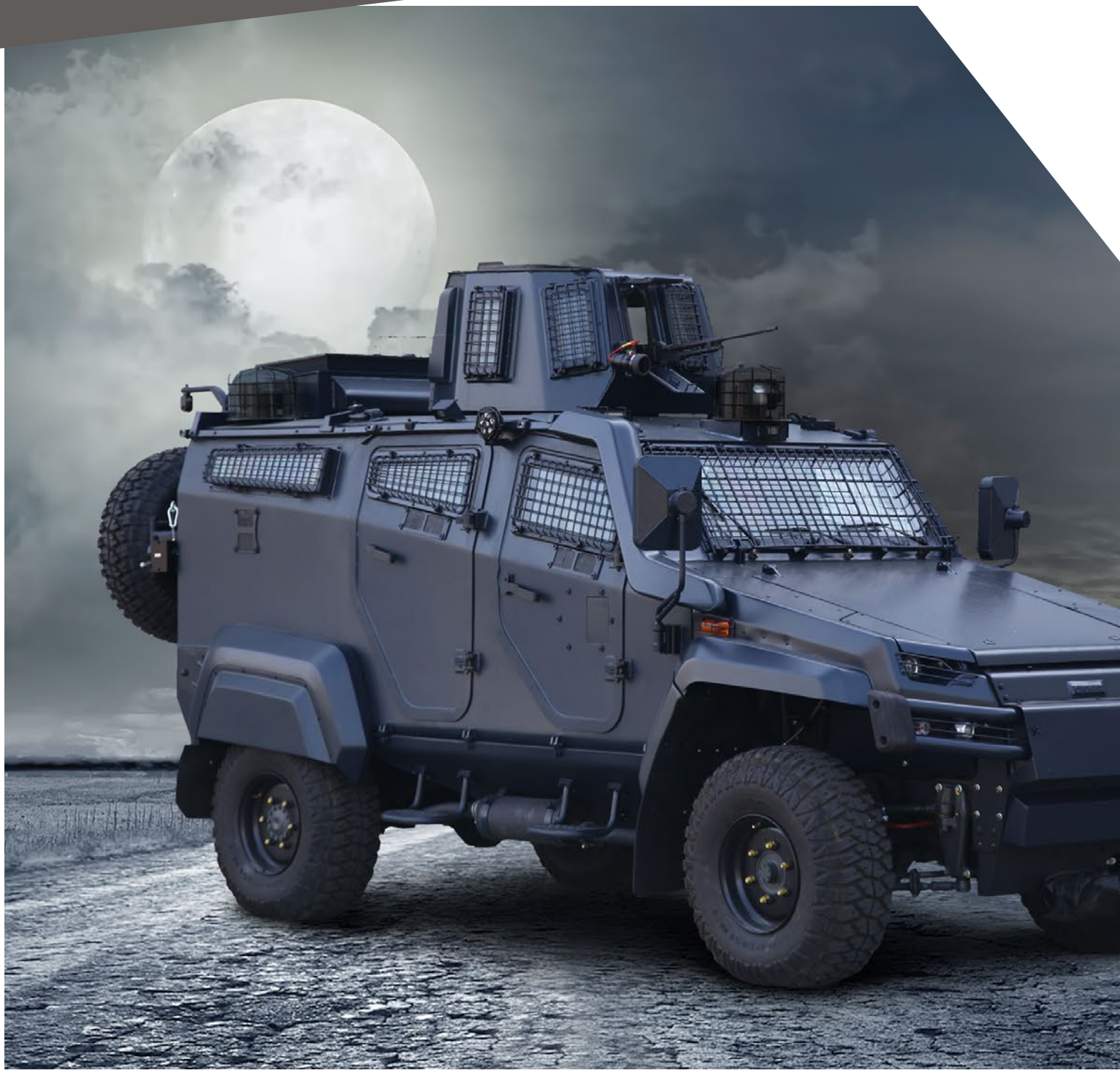
Highlights

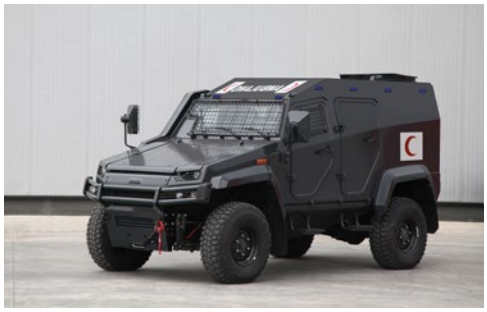
Silent operation with the serial hybrid electric drive architecture,
Modular platform suitable for various mission equipment,
Ability to carry mini-UGV, that can increase mission capability,
Ability to operate autonomously and remote controlled,
Low thermal and acoustic signature,
High off-road mobility equalling to Armored Fighting Vehicles and Light Tanks
Air transportable,
Quick-change battery pack,
Simple and easy-to-maintain platform LRU's, low logistic signature in the field.



URAL

4x4 LIGHT ARMORED TACTICAL VEHICLE

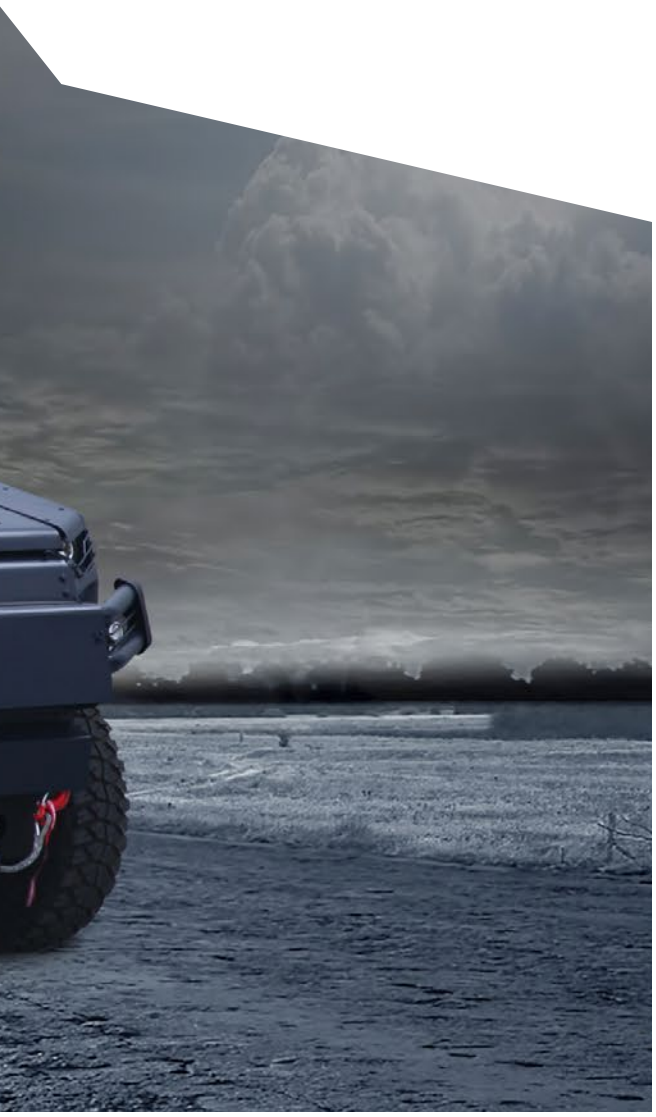


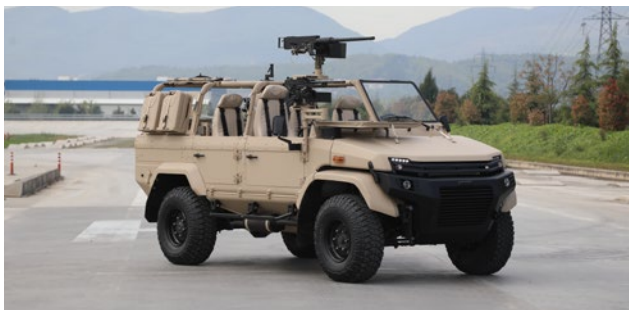


With a universal design, superior protection and excellent mobility, the URAL Armored Personnel Carrier is offered in a variety of options to serve in multiple tasks and missions in line with customer demands.

Optimized modular body construction design enables many configurations and assembly of various weapons/equipment required by diverse missions, offering a single platform for multiple operations.

Samples of the vehicle derivatives with different vehicle body, cupolas and accessories designed for various missions are presented. In addition to Ural Armored Personnel Carrier vehicles with cupolas suitable for various weapons, Ambulance, Internal Security Vehicle, Armored Personnel Carrier with Remote-Controlled Weapon Station, Fuel Refuelling Vehicle, Single-Cab Pickup, Command and Control Vehicle and Special Operations Vehicle derivatives are already available.





URAL TECHNICAL SPECIFICATIONS

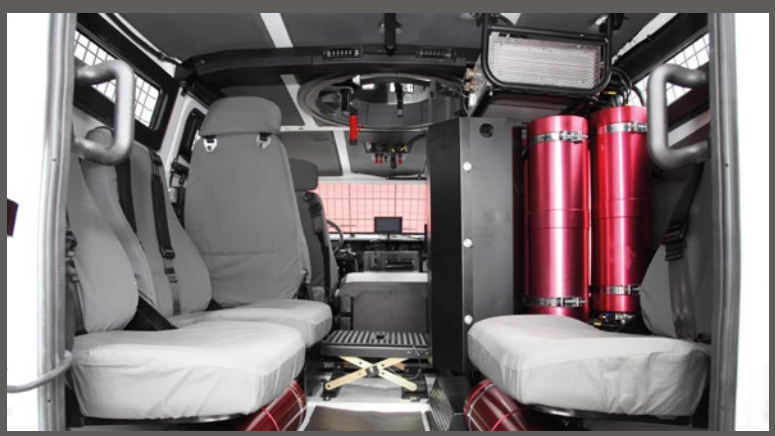
WEIGHT AND DIMENSIONS	STANDARD URAL 168 HP	OPTION URAL 250 HP
Gross Vehicle Weight	6400 kg	8000 kg
Personnel Capacity	8, including the driver and commander	8, including the driver and commander
Overall Length	4900 mm (excluding winch and spare wheel)	4900 mm (excluding winch and spare wheel)
Overall Width	2200 mm (excluding mirrors)	2200 mm (excluding mirrors)
Overall Height	2440 mm (top of roof)	2480 mm (top of roof)
Ground Clearance (Under belly)	320 mm	350 mm
ENGINE	Turbo Charged Diesel Engine 168 HP	Turbo Charged Diesel Engine 250 HP
GEARBOX	Automatic, 6 speed forward, 1 speed reverse	Automatic, 6 speed forward, 1 speed reverse
TRANSFER BOX	Permanent four-wheel drive, 2-Speed incorporating centre differential	Permanent four-wheel drive, 2-speed incorporating centre differential
FRONT / REAR AXLES	Independent front suspension, rigid rear axle	Chassis mounted all independent axles on front and rear
SUSPENSION	Chassis mounted independent suspension, anti-roll bar with torsion bar and telescopic-hydraulic shock absorbers at the front. Chassis mounted rigid axle with parabolic leaf spring and telescopic-hydraulic shock absorbers at the rear	Chassis mounted all independent suspension axles, anti-roll bar with coil springs and telescopic-hydraulic shock absorbers at the front and rear
BRAKES	Air-over-hydraulic, dual line brake system	Air- over-hydraulic, dual line brake system with ABS
STEERING	Hydraulically assisted, forward-backward and up-down adjustable steering wheel Left-hand drive or right-hand drive	Hydraulically assisted, forward-backward and up-down adjustable steering wheel Left-hand drive or right-hand drive
TYRES	Military type run-flat tyres	Military type run-flat and 325/85 R16 tyres
ELECTRICAL SYSTEM	24 Volts electrical system installation, 10 Amperes alternator, 2x12 Volts 105 Ah batteries	24 Volts electrical system installation, 120 Amperes alternator, 2X12 Volts 105 Ah batteries
PERFORMANCE DATA		
Maximum Speed	110 km/h	110 km/h
Maximum Fording Depth	600 mm	700mm
Side Slope	40%	40%
Maximum Gradeability	60%	60%
Angle of Approach	40° (without winch)	60° (without winch)
Angle of Departure	43°	45°
Range	600 km	600 km

STANDARD FEATURES

Air conditioning system
Smoke extractor fan
Main switch
4 points seatbelts for all seats
External start socket
Front fog lamps
Stone grills on lights and lamps
2 way black-out system
Two speed wiper with intermittent wipe
Convoy lamp
Lifting provisions
4 off vehicle recovery and tiedown provisions at the front and rear
Engine fire suppression system
Raised air intake
Gun ports all around
Two-flap rear door
Foldable rear step
LED interior lights and lamps
Impact resistant rear view mirrors
Emergency exit hatch that can only be opened from the inside and provides ballistic protection equivalent to the hull
Toolboxes
Easily deployable front dash and centre console for quick maintenance
Ergonomic full size seats with headrest foldable cushion and washable seat covers
Reclining and covered with artificial leather (vinyl) driver and commander seats with fore and aft movement, and head restraint
Spare wheel carrier at the rear
Flame retardant paint

OPTIONS

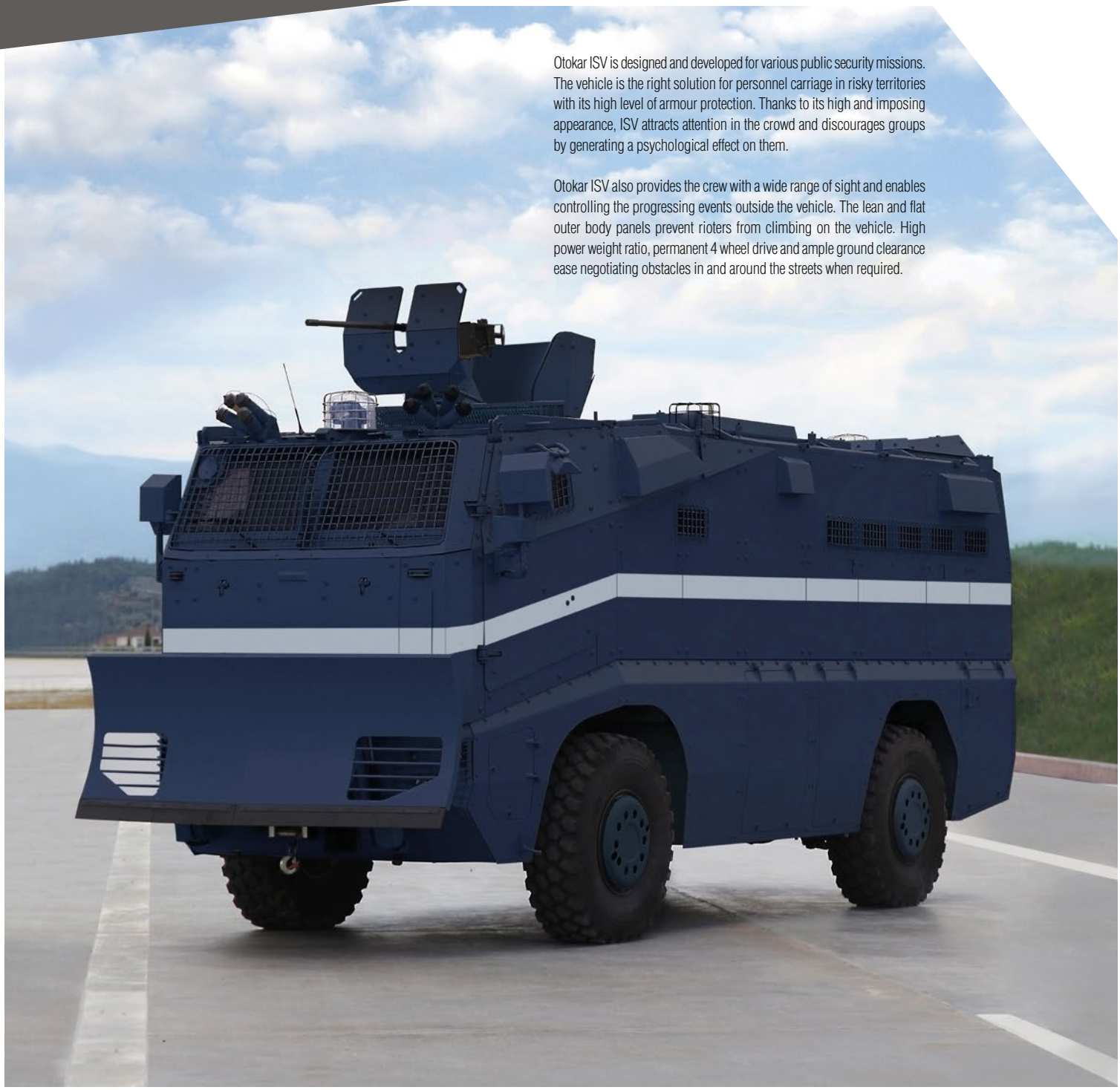
Self recovery winch
Smoke grenade launchers (76 mm or 66 mm)
Tyre fire extinguishing system
External fire extinguishing system
Automatic fire suppression system for crew compartment
LED strobe lights
Public announce system
5-point seat belts
Open or closed cupolas and RCWS systems for various calibre weapons
Pan-tilt zoom camera on an extendible mast operated from inside the vehicle
10 persons capacity with 3 door configuration
9 persons capacity with 5 door configuration
Acoustic repellent device
Rifle clips
Front and rear view cameras
Cold weather package
Positive pressure system against CBRN (Chemical, Biological, Radiological, and Nuclear) threats
Provision for radio system
24V lighter jack
Light bar
Molotov cocktail protection kit
Remote controlled projector
Stone grills on all glazing
Front barricade remover
Manually adjustable roof ladder for platform and ladder for special operations

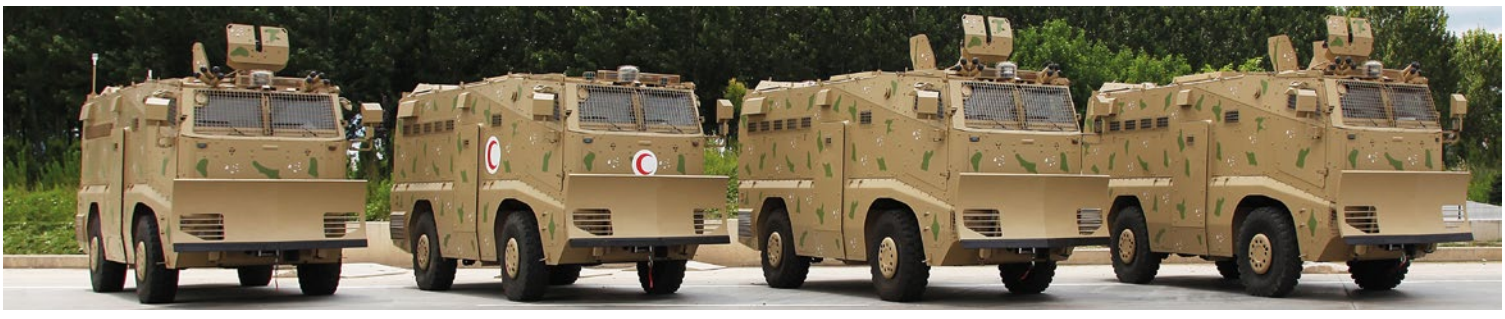


4x4 INTERNAL SECURITY VEHICLE

Otokar ISV is designed and developed for various public security missions. The vehicle is the right solution for personnel carriage in risky territories with its high level of armour protection. Thanks to its high and imposing appearance, ISV attracts attention in the crowd and discourages groups by generating a psychological effect on them.

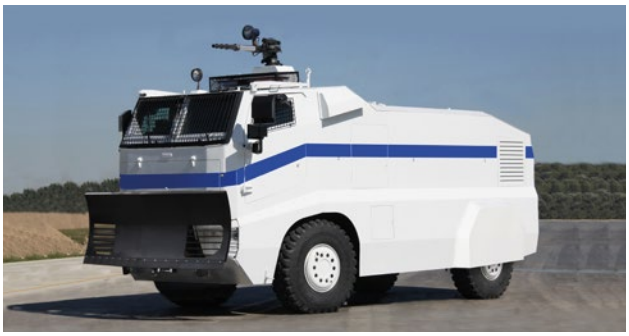
Otokar ISV also provides the crew with a wide range of sight and enables controlling the progressing events outside the vehicle. The lean and flat outer body panels prevent rioters from climbing on the vehicle. High power weight ratio, permanent 4 wheel drive and ample ground clearance ease negotiating obstacles in and around the streets when required.



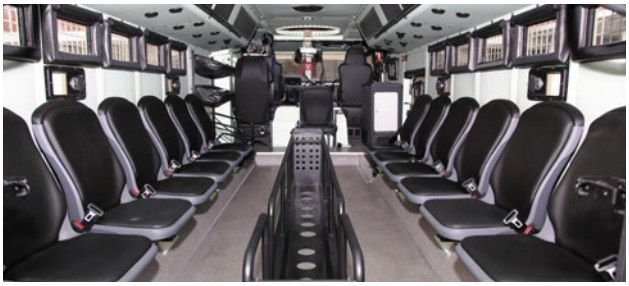


Water Cannon Variant

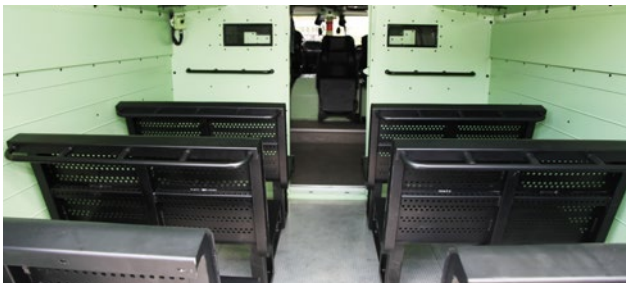
The Water Cannon Variant has an armored cab for the driver and the operator at the front. The vehicle is fitted with an auxiliary engine located at the rear, to drive the water pump that powers the system. The tanks, the auxiliary engine and the rest of the system components are encapsulated behind the hull made of high-hardness steel, which provides protection against vandalism.



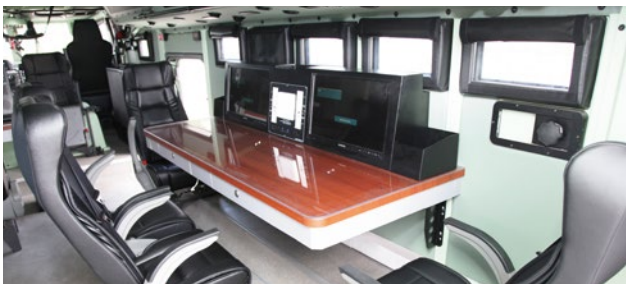
WATER CANNON



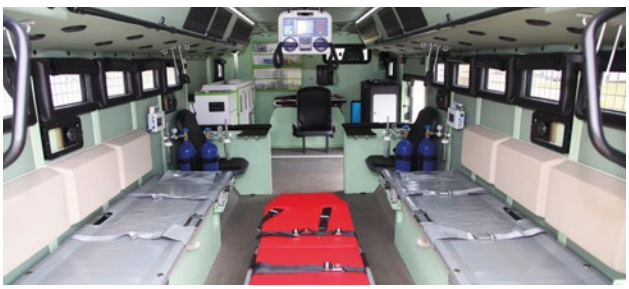
PERSONNEL CARRIER



PRISONER CARRIER



COMMAND CONTROL



AMBULANCE

INTERNAL SECURITY VEHICLE TECHNICAL SPECIFICATIONS

WEIGHT AND DIMENSIONS		Water Cannon Variant
Gross Vehicle Weight	19000 kg	19000 kg
Maximum Crew Capacity	16	2
Length	7700 mm (with barricade remover)	7700 mm
Width	2590 mm	2590 mm
Height	3850 mm (with turret)	3850 mm
Ground Clearance	380 mm	
ENGINE	Turbo Charged Diesel Engine, 440 HP	
TRANSMISSION	Automated 12 forward, 2 reverse	
TRANSFER CASE	Permanent 4 wheel drive, 2 speed with high and low ranges, central differential lock	
AXLES	Heavy duty axles with 100% differential locks	
SUSPENSION	Heavy duty parabolic springs at front and rear, hydraulic telescopic shock absorbers, anti-roll bars	
BRAKES	Dual circuit, compressed air brake with automatic brake shoe adjustment automatic, air drier device and ABS. Spring type parking brake acting on rear wheels. Exhaust brake with simultaneous action	
STEERING	Hydraulic power steering system, left hand drive	
TYRES	Military type run flat 14R20 tyres	
ELECTRICAL SYSTEM	24 V, 12 V, 230 Ah Maintenance-free Batteries, 28 V Alternator	

PERFORMANCE DATA		WATER CANNON SYSTEM	
Maximum Speed	100 km/h limited electronically	Water Tank Capacity	6000 L
Fording Depth	850 mm	Auxiliary Engine	Diesel, 100 HP
Side Slope	30%	Shooting Range	50 m at 8 to 12 bar (at the nozzle exit)
Gradeability	60%	Cannon Material	Aluminium
Vertical Obstacle	380 mm	Movement	Pan tilt movement by DC electric motor
Trench Crossing	600 mm	Rotation Speed	Slow/fast rotation modes
Angle of Approach	20° (with barricade remover retracted)	Gas / Dye / Foam Injection	13 bar injection supplied from 60 / 60 / 80 lt. tanks
Angle of Departure	20°		
Range	600 km		

INTERNAL SECURITY VEHICLE STANDARD FEATURES

The frame is designed especially for heavy duty on and off-road conditions
Ladder frame chassis with riveted and bolted cross members
Independent air conditioning with auxiliary power unit (APU)
Public announce system and siren
Internally wired remote controlled front & rear searchlights
Roof hatch
Heated and remote controlled rear view mirrors
Ventilation and heating system
Wire-mesh protection on all glazing
Pneumatically operated wire-mesh protection on windscreen
Wire-mesh protection on all exterior lights
Towing attachments in front and rear
Gun ports all around
Teargas launcher port on the front glazing
Removable door handles for increased security
Smoke extractor fan on the roof
Hydraulically operated ramp door with steps at the rear
Hydraulically operated right sliding crew doors at the side
Flap doors with open-lock mechanism for the driver & commander
Fixed cameras at the front and rear
Bolt-on Molotov cocktail protection shields for the engine air & radiator air inlets
Fire retardant paint
Rifle holders
Spiked mirror arms to prevent rioters from climbing on the vehicle
Light bar and front/rear flasher lights
Hydraulic front barricade remover with brush underneath
Automatic fire extinguishing system for engine compartment
Automatic fire extinguishing system for APU compartment
Automatic fire extinguishing system for fuel tank compartment

Standard Features and Equipments

Single touchpad control panel for setup and operation
Friendly user interface
Multi language operation, settings, maintenance and help menus
Menus with detailed information
Diagnosis function and data export through compatible computer socket
Camera with night vision function
Single hand control system carries out all the necessary functions of the water cannon and the camera
Wide screen LCD displays for surveillance and cannon cameras
360° rotation capability
Shooting modes with short/long intervals and continuous operation
Gas/dye mixtures with adjustable ratio
Blockage prevention on the gas/dye/foam nozzles with automatic after-shot treatment
Gas spraying protection system around the vehicle
Fire extinguishing system on the roof and body, above each wheel and underneath the vehicle
Ability to shoot foam through the water cannon
Water supply from water ponds, rivers, sea

INTERNAL SECURITY VEHICLE OPTIONAL EQUIPMENT

Smoke grenade launchers
Multiple grenade launcher system
Additional armour
Customized turrets for different types of weapons
Electric Self Recovery Winch
Sound cannon
Crowd pusher
Camera and video recording system with retractable 360 degree
220V and 12V power outlet
Antenna mounts for different configurations
Radio trays for different configurations
Over-pressure & NBC gas filtration system
Wire cutters fitted on either front side of the vehicle
Automatic fire suppression system for crew cabin
Fire suppression system for wheel station
Fire suppression system for exterior surface
Stowage for riot gear & ammunition
Refrigerator and hot water dispenser
Hydraulically operated two sliding crew doors at the sides
Molotov cocktail protection kit

Water Cannon Variant

Camera and video recording system with retractable 360 degree
Smoke grenade launchers
Multiple grenade launcher system
Over-pressure & NBC gas filtration system
Sound cannon
Crowd pusher
Antenna mounts for different configurations
Radio trays for different configurations
Fire suppression system for wheels
Automatic fire suppression system for cabin crew
Electric self-recovery winch

Water Cannon Vehicle Variants

10 tons water capacity (6x4 and 6x6 vehicle configurations)
2x water cannons with separate remote control stations, 2+3 crew capacity (6x4 and 6x6 vehicle configurations)

Otokar

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