EJDER 6X6
ARMOURED COMBAT VEHICLE
FAST, DYNAMIC, AMPHIBIOUS, HIGH PROTECTION
MODULAR, SAFE, EASY CARE AND
LOW MAINTENANCE

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Today, the battlefield emerges with its multiple variable dynamics and all sort of asymmetric threats. Therefore, operational requirements of the battlefield highlights the need for flexible, indigenous, modular and lighter new combat vehicles and systems, instead of heavy and bulky ground combat vehicles. Today’s new combat vehicles shall be able to figure out dynamic requirements of the combat zone.

EJDER 6X6 Armored Combat Vehicle is dynamic and ergonomic vehicle against to today’s threats and sudden changes of the battlefield. Main specifications of EJDER 6X6 Armored Combat Vehicle:

- High level ballistic protection
- High level mine protection
- Improvised Explosive Device (IED) protection
- High degree of operational readiness

**Base Vehicle Specifications**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Crew</strong></td>
<td>2 + 10</td>
</tr>
<tr>
<td><strong>Length</strong> (m)</td>
<td>6.95</td>
</tr>
<tr>
<td><strong>Width</strong> (m)</td>
<td>2.69</td>
</tr>
<tr>
<td><strong>Height</strong> (m)</td>
<td>2.30</td>
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<tr>
<td><strong>Ground Clearance</strong> (m)</td>
<td>0.40</td>
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<tr>
<td><strong>Wheel Base</strong> (m)</td>
<td>1.50/1.90</td>
</tr>
<tr>
<td><strong>Gross Vehicle Weight (Optional 21,000 kg)</strong></td>
<td>16,000 kg</td>
</tr>
<tr>
<td><strong>Max. Speed</strong> (km/h)</td>
<td>110</td>
</tr>
<tr>
<td><strong>Amphibious Speed</strong> (km/h)</td>
<td>9</td>
</tr>
<tr>
<td><strong>Cruising Range</strong> (km)</td>
<td>800</td>
</tr>
<tr>
<td><strong>Engine</strong></td>
<td>450 HP@2200rpm, diesel Cummins</td>
</tr>
<tr>
<td><strong>Transmission</strong></td>
<td>Automatic</td>
</tr>
<tr>
<td><strong>Power-to-weight Ratio</strong></td>
<td>6 forward, 1 reverse speed</td>
</tr>
<tr>
<td><strong>Suspension</strong></td>
<td>Fully Independent wheel suspension system, telescopic absorbers and springs on each wheel with control arms</td>
</tr>
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**Performance Specifications**

For rough and difficult terrain conditions of battlefield
- 0,5 m step climbing
- 1,1 m trench crossing
- 70% gradient
- 40% side slope
- 8 m Turning radius
- 4 km/h minimum operational speed

**EJDER 6X6 ARMOURED COMBAT VEHICLE**

**Mobility**

- Optimal vehicle size
- Fully independent wheel suspension
- Steering of 1st and 2nd axles
- Optional Central Tire Inflation System (CTIS), with control and adjustment capability on the move
- Run flat tires (operational up to 50 km range)
Tactical Specifications
- Low silhouette
- Minimum acoustic and thermal signature for decreasing detection possibility of the vehicle
- Excellent view for the commander and the driver, by optimized optic sights,
- Low fuel consumption, large fuel tank and higher cruising range

Transportation Options
- By Tactical Transport Airport (C-17, C-130, An-70 and A400M)
- By rail-ways in accordance with International Standards
- By Military and Civil Transportation Vehicles
- By Vessel

Operational Readiness
- Easy use
- High degree of operational readiness
- Easy maintenance
- Cost effectiveness for operations, maintenances and services

Environmental Conditions
Satisfies “A2, A3, B1, B2, C0 and C1” climate categories according to Stanag 2895

General View
EJDER 6X6 Armored Combat Vehicle meets the user requirements with its fast adaptation to the battlefield. EJDER 6X6 Armored Combat Vehicle can be customized for various applications such as “Reconnaissance”, “Command and Control”, “Fire Support”, “Personnel Transport”, “Medical Evacuation”, “Ammunition Transport” and “Air Defense” missions.

Driver and the Crew
12 crew can travel with high level of comfort. As a result of its superior design, crew seats are ergonomic and the vehicle provides high comfort during long-distance drive. By the extravehicular positioned cameras and separate monitors on board, the driver, commander and personnel are able to easily monitor outside in day and night conditions.

Protection
EJDER 6X6 Armored Combat Vehicle offers a high protection level against mine threat. EJDER 6X6’s high level mine protection put forward the vehicle in its category. Not only the protection level of vehicle against mine explosion, also minimizing the explosion effect on personnel is provided by its great design and architecture. Its original and ergonomic properties are;
- Special frame structure design that supports the “V” shape structure against mine explosions, by distributing the mine blast energy to the side walls of the vehicle.
- Hull design and hanging seats for protecting personnel against mine shock.
- Monocoque body.
- Assembly of critical parts with mechanical locking method.
- More stiff roof with special 3D design

Vehicle body is formed by 3 main sections; Driver and Commander Compartment, Powertrain Compartment and Crew Compartment.

One of the most important factors for injuries of the personnel is sudden bending of the vehicle bottom during the mine blast. Ejder 6x6 avoids the effect of sudden bending effect by its floating floor and suspended shock-absorbing seat designs.
Power Transmission

All wheel traction and automatic transfer in differential lock capabilities are provided as computer-controlled. In this way, driveline wear and tear is minimized and higher mobility in the battlefield has been achieved.

Engine

The vehicle has 450 horsepower, diesel engine and full automatic (electronic control) transmission system and it can reach 110 km/h maximum speed on paved road. It has a 25 HP/ton power to weight ratio and 800 km cruising range.

Transmission

Transmission is 6 forward and 1 reverse automatic. In order to provide high level gear quality over wide operational conditions, closed-loop controlled clutch Alison 4th generation transmission is used, electronically controlled by microprocessor.

Amphibic System

By two mechanically actuated hydraulically controlled 120 HP water jets, the vehicle has 9 km/h speed in water. The amphibic operation of the vehicle does not need special preparation.

Suspension System

The negative effects of road vibration on the crew, are reduced to minimum. According to the international transportation standards, EJDER 6X6’s comfort level is equal comfort level for 9 hour bus drive.

- Fully independent
- Double suspension arm
- McPherson pier support
- Hydro pneumatic (optional)
- By the acoustic insulation and comfortable suspension system design of the vehicle, travelling effects are minimized. By minimizing these effects high transportation comfort level is achieved in hard conditions of battlefield and readiness for fighting capability of the crew is increased

Wheel Hub

- Hub (speed reducer)
- Hydraulic Brake Calipers (Calipers)
- CTIS
- ABS

Tires and Central Tire Inflation System (CTIS)

EJDER 6X6 Central Tire Inflation System (CTIS) allows adjusting the tire pressures independently while the vehicle is stationary or on the move. CTIS alerts the user when the top speed is exceeded in the field conditions and adjusts the tire pressures automatically if the vehicle continues to high speed travel. CTIS continually checks the tire pressures.

Tire Size: 395/85R20

Run-flat

Steering System

Hydraulic
Brake System

Brake system involves service type and park type brakes. It has hydro pneumatic controlled dual-circuit service brake system and air-disc on each wheel. It has 6m/6s ABS (EC R13) property. Parking brake is hydraulically controlled spring-loaded disc type handbrake.

Camera System

The vehicle is equipped with camera systems; one is in the rear and other in front of the vehicle. Front and rear of the vehicle can be monitored in day and night conditions. The display monitors can be placed optionally in driver section, commander section and crew section if required. Video can be monitored on the monitors separately. The front and rear cameras are colored day/night cameras and they provide night vision over 50 meters. Cameras satisfy with military environmental condition standards.

Superior Properties of EJDER 6X6 ACV;

- 6X6
- Run-flat tires
- High Powered engine
- Independent suspension system for all wheels
- Excellent off-road performance
- High level ballistic protection
- Add-on armor protection solutions for higher ballistic protections
- High level mine protection
- Explosive (IED) protection
- Ergonomic and wide interior design
- High power-to-weight ratio
- Air transportable
- Full amphibious, (unprepared)
- Superior maneuverability capabilities,
- High-mobility in water
- High comfort level

Armament and Tower

Various types of weapon and turret weapon systems can be integrated to EJDER 6X6. With the base weapon station configuration of the vehicle includes remotely controlled 7.62 mm or 12.7 mm machine gun and 40 mm automatic grenade launcher. EJDER 6X6 also supports larger weapon systems. With its weapon station configuration properties, vehicle can be configured as a combat support vehicle or reconnaissance vehicle Weight of vehicle can be increased up to 21 tons by strengthening the suspension system, for the integration of heavy weapon stations or turrets. By this way, up to 5 tons of weapon systems can be integrated to the vehicle. The vehicle also allows integration of the weapon systems that has gunner basket up to 1 or 2 crew inside the vehicle, such as 25, 30, 40 mm armed turret systems. Integration of larger weapons can be provided with structural strengthening. Besides the gun towers, large number of smoke grenade launchers can be added according to the customer’s requirements.