Scientists and engineers of 31 Ukroboronprom design bureaus make remarkable contributions to scientific and technological progress of the country. Nearly 80,000 of highly trained employees both in production and engineering are working for Ukroboronprom in 5 major defence industry sectors. 40%+ high-level specialists with degrees in engineering, applied math, physics, etc. The top management understands the need to attract skilled and educated professionals to move forward, that is why we expand long-term cooperation with the best universities of Ukraine.

Ukroboronprom was established in 2011 for improving coordination and performance of the military-industrial complex of Ukraine. Ukroboronprom is the largest state defence holding company in Ukraine, uniting 130+ enterprises, some of which have more than 70 years of experience in the field of defence and security.

Our Values:
- We value and protect human life as a main priority
- We are constantly searching for new ideas to ensure peace and security
- We put quality as the basis of our production
- We enhance Ukraine’s defence capability, preventing new threats

Our MISSION:
Help our customers solve complex tasks using advanced technologies and innovative approach

Our Vision:
To be a reliable partner in the world of defence
UkrOboronProm management has developed a promising model of industry-specific clusters with clear specialization. We are proud that Ukraine is one of the few countries in the world that has great technological knowledge in the industry and a full production cycle.
GOVERNMENT-AUTHORIZED EXPORTERS TO CARRY OUT EXPORT AND IMPORT OF MILITARY AND DOUBLE USE PRODUCTS WITH 20+ YEARS OF EXPERIENCE IN 90+ COUNTRIES WORLDWIDE:

- weapons and ammunition
- military and special purpose equipment
- dual-use materials and technologies
- maintenance of military and dual-purpose products

Being the part of Ukroboronprom, exporters ensure and facilitate trade of military and double-use products across the border, acting as intermediate agents for Ministry of Defence, Armed Forces, Emergency Situations Service, as well as other companies in Ukraine specialized in development, production, maintenance and repair for defense/military purposes.
ARMORED MILITARY VEHICLES

POWER OF PROTECTION

Ukroboronprom has a full production cycle of armored vehicles. Our goal is to provide armored vehicles with innovative systems and modern technologies, allow Ukrainian army and our clients to conduct military operations anywhere at any time with utmost efficiency.

WE DO:
- customized designing and development, meeting specific customers needs
- produce:
  - heavy and light armored vehicles
  - multi-purpose systems and devices
  - engines, units and aggregates
- repair and modernization
- equipment maintenance and repairs
- simulators
**BM Oplot**

**Main Battle Tank**

Main battle tank “Oplot” is intended for combat operations in attack and defence, day and night, in different climate and road conditions, as well as in water and during using of weapons of mass distraction by enemy.

**Armament:**

- **Gun**: KBA-3
- **Caliber**: 125 mm
- **Coaxial machine gun**: KT-7.62
- **Caliber**: 7.62 mm
- **Anti-aircraft machine gun**: KT-12.7
- **Caliber**: 12.7 mm

- Panoramic and thermal imaging sight.
- Satellite navigation works using the Glonass and Navstar systems.
- Communication facilities provide control at the distance up to 50 km, with additional antennas – up to 350 km.

**Special difference of Ukrainian tank “Oplot” has:**
- more powerful diesel engine 6TD-2 (1200 hp, 882 kW);
- combined system for moving control;
- digital board for drivermechanic;
- dynamic protection of new generation;
- improved level of tank side security;
- commanders sight;
- up-to-date aiming and observation devices;
- anti-aircraft machine gun of closed type.

**PT-17**

**Battle Tank**

The PT-17 battle tank is joint project of Kharkiv Morozov Design Bureau and Zakłady Mechaniczne “Bumar – Labedy” S.A. The PT-17 is armed with the Ukrainian-made 100mm smoothbore KMB2 cannon which offers the possibility to fire all the NATO ammunition. The turret is fitted with an automatic loading system located at the rear of the turret with a total of 22 rounds.

- **Dimensions**: 9720x3775x2285
- **Crew**: 3
- **Weight**: 48.5 t
- **Engine capacity**: 1200 h/p
- **Maximum speed**: 70 km/h

**Armament:**

- **Gun**: KMB2 120mm
- **Coaxial machine gun**: 7.62 mm
- **Anti-aircraft machine gun**: 12.7 mm
- **Automatic grenade launcher**: 40 mm

**T-64B (BV)**

**Main Battle Tank**

T-64B (BV) Main Battle Tank is an upgraded version of T-64A tank. Essentially new constructive solutions were implemented in T-64b (BV) Tank.

- **Dimensions**: 9225x3415x2170
- **Crew**: 3
- **Weight**: 42.4 t
- **Engine capacity**: 1100 h/p
- **Maximum speed**: 60 km/h

**Armament:**

- **Gun**: KBA-3 or 2A46M-1 / 125 mm
- **Coaxial machine gun**: KT-7.62 or PKT / 7.62 mm
- **Anti-aircraft machine gun**: KT-12.7 or NSVT-12.7 / 12.7 mm

**Armored Military Vehicles**
**T-80UD**

**MAIN BATTLE TANK**

Tank are designed to destroy tanks and other military equipment, manpower and defeat air targets.

**Dimensions**
- Width: 3750
- Length: 9690
- Height: 3245

**Armament**
- Gun: 2A46M-1 / 125 mm
- Coaxial machine gun: PKT / 7.62 mm
- Anti-aircraft machine gun: NSVT / 12.7 mm

**Crew:** 3

**Weight:** 46

**Engine capacity:** 1000

**Maximum speed:** 70 km/h

**T-72AMT**

**UPGRADED TANK**

T-72AMT - upgraded T-72A is intended for combat missions of troops in offensive and defensive, as effective means mass of active combat operations on the ground in terms of both conventional and nuclear war.

**Dimensions**
- Width: 3560
- Length: 9830
- Height: 2226

**Armament**
- Gun: 2A46M-1 / 125 mm
- Coaxial machine gun: PKT / 7.62 mm
- Anti-aircraft machine gun: NSVT / 12.7 mm

**Crew:** 4

**Weight:** 46.6

**Engine capacity:** 840

**Maximum speed:** 60 km/h

**BULAT**

**MAIN BATTLE TANK**

It is intended to destroy all types of ground and low-flying low-speed air targets.

The additional protection package provides the tank protection against various types of destruction weapons.

It is possible to install additional equipment, namely: auxiliary power unit, power pack thermal protection, air-conditioning system, etc.

**Dimensions**
- Width: 3560
- Length: 9295
- Height: 2184

**Armament**
- Gun: KBA-3 or 2A46M-1 / 125 mm
- Coaxial machine gun: KT-7.62 or PKT / 7.62 mm
- Anti-aircraft machine gun: KT-12.7 or NSVT-12.7 / 12.7 mm

**Crew:** 3

**Weight:** 45

**Engine:** V-46-5M, 690 hp

**Maximum speed:** 60.5 km/h

**T-55AM**

**MODERNIZED TANK**

Designed to fulfill combat missions for troops which are attacking or defending, as a mass efficient means of active military operations on land in conventional and nuclear war.

**Dimensions**
- Width: 3536
- Length: 9000
- Height: 2226

**Armament**
- Filled gun barrel with ThermoJacket: 100mm
- Anti-aircraft machine gun: DSKM

**Crew:** 4

**Weight:** 41.5 + 15%

**Engine:** V-46-5M, 690 HP

**Maximum speed:** 50 KMH
**BTR-3E1**

**ARMORED PERSONNEL CARRIER**

The BTR – 3E1 armored personnel carrier (APC) is intended to transport mechanized infantry units and to provide fire support in combat operations. It can be used as a basic vehicle for equipping quick-reaction forces and marine units. The APC can operate day and night, under various climatic conditions, on hard-surface roads, off-road, and in NBC environment. The operating temperature range of the APC is –40 to +50 °C.

### Armament

<table>
<thead>
<tr>
<th>Armament</th>
<th>Caliber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Gun</td>
<td>ZTM-1</td>
</tr>
<tr>
<td>Coaxial machine gun</td>
<td>KVT-7.62</td>
</tr>
<tr>
<td>Grenade launcher</td>
<td>KBA-117 (AG-17)</td>
</tr>
<tr>
<td>Antitank missile complex</td>
<td>complex 326</td>
</tr>
</tbody>
</table>

### Dimensions

| Range of fire maximum     | 5000 m                   |

### Crew

- Weight: 7850 kg
- Engine capacity: 2900 h/p
- Maximum speed: 30 km/h

### Main armament

- 30 mm Automatic Gun ZTM-1
- 7.62 mm Coaxial machine gun KVT-7.62
- 30 mm Grenade launcher KBA-117 (AG-17)

### Anti-tank complex

- BM-3 "Shturm" combat module

### Crew

- The crew is accommodated in the airtight and waterproof hull which protects them against nuclear radiation, chemical and biological effects.
- Engine: MTU 6R106TD21 or DEUTZ BF6M 1015
- Transmission: Automatic, Allison Transmission 3200 SP

### Armament

- "Shturm-M" combat module
- KVT-7.62 "Shkval" combat module

### Crew

- The crew is accommodated in the airtight and waterproof hull which protects them against nuclear radiation, chemical and biological effects.
- Engine: MTU 6R106TD21 or DEUTZ BF6M 1015
- Transmission: Automatic, Allison Transmission 3200 SP

### Equipment

- Air conditioner (cooling efficiency, kW): 10
- Heater (heating efficiency, kW): 18
- Pull winch (force, I): 6
- Firefighting system (type): Automatic
- Filtration unit (type): With full-flow filter
- Auxiliary Equipment: Pull winch (force, I): 6

**BTR-3K**

**ARMORED PERSONNEL CARRIER**

Vehicle is intended for control of mobile subunits of infantry forces, equipped with BTR-3E1 Armored Personnel Carriers. It is capable to follow tanks, overcome trenches and water obstacles on the move.

### Dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>7850x2900x2774</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>3-6</td>
</tr>
<tr>
<td>Engine capacity, h/p</td>
<td>16,5</td>
</tr>
<tr>
<td>Maximum speed, km/h</td>
<td>100</td>
</tr>
</tbody>
</table>

### Armament

- Automatic gun: ZTM-1 / 30 mm
- Machine gun: PKT (KVT-7.62) / 7.62 mm
- Grenade launcher: AG-17 / 30 mm
- Anti-tank missile system: ATMS "Barrier"

### Crew

- The crew is accommodated in the airtight and waterproof hull which protects them against nuclear radiation, chemical and biological effects.
- Engine: MTU 6R106TD21 or DEUTZ BF6M 1015
- Transmission: Automatic, Allison Transmission 3200 SP

### Equipment

- Pull winch (force, I): 6
- Firefighting system (type): Automatic
- Filtration unit (type): With full-flow filter
- Heater (heating efficiency, kW): 18
- Air conditioner (cooling efficiency, kW): 10

**BTR-3RK**

**ARMORED PERSONNEL CARRIER**

The BTR-3RK - armored personnel carrier (APC) for use in mechanized infantry units of the Army is able to keep the tanks on the move to overcome the trenches, trench water obstacles. By car found fighting NSVT module is equipped with a machine gun and anti-tank systems.

### Dimensions

<table>
<thead>
<tr>
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<td>100</td>
</tr>
</tbody>
</table>

### Armament

- Main armament: Anti-tank missile system / 4 guides
- Auxiliary armament: Turret machine gun mount
- Machine gun: NSVT-12.7 / 12.7 mm

### Crew

- The crew is accommodated in the airtight and waterproof hull which protects them against nuclear radiation, chemical and biological effects.
- Engine: MTU 6R106TD21 or DEUTZ BF6M 1015
- Transmission: Automatic, Allison Transmission 3200 SP

### Equipment

- Pull winch (force, I): 6
- Firefighting system (type): Automatic
- Filtration unit (type): With full-flow filter
- Heater (heating efficiency, kW): 18
- Air conditioner (cooling efficiency, kW): 10
### BTR-3M1
**81-MM SELF-PROPELLED MORTAR**

- **Armament:**
  - Main armament: 81-mm mortar
  - Machine gun: NSVT (KTV-12.7)
  - Caliber: 12.7 mm

- **Dimensions:**
  - Length: 7850 mm
  - Width: 2900 mm
  - Height: 2600 mm

- **Crew:** 4

- **Engine:** MTU 6R106TD21
  - Engine capacity: 1000 h.p.

- **Maximum speed:** 62 km/h

- **Weight:** 16.5 t

- **Armament:**
  - 81-mm self-propelled mortar

- **BTR-3M1** is designed to give direct fire support to infantry units. It is able to follow the tanks as well as to overcome trenches, ditches and water obstacles on the move.

### BTR-3M2
**120-MM SELF-PROPELLED MORTAR**

- **Armament:**
  - Main armament: 120-mm mortar
  - Machine gun: NSVT (KTV-12.7)
  - Caliber: 12.7 mm

- **Dimensions:**
  - Length: 7850 mm
  - Width: 3560 mm
  - Height: 2226 mm

- **Crew:** 3

- **Engine:** MTU 6R106TD21
  - Engine capacity: 1500 h.p.

- **Maximum speed:** 60 km/h

- **Weight:** 15.5 t

- **Armament:**
  - 120-mm self-propelled mortar

- **BTR-3M2** is designed to give direct fire support to infantry units. It is able to follow the tanks as well as to overcome trenches, ditches and water obstacles on the move.

### BTR-3BR
**ARMORED REPAIR AND RECOVERY VEHICLE**

BTR-3BR Armored Repair and Recovery Vehicle is designed to conduct technical reconnaissance on the battle area day-and-night damaged and unguided vehicles to the nearest hiding or assembling place for damaged cars; carry out load-lifting works.

- **Dimensions:**
  - Length: 7650 mm
  - Width: 2600 mm

- **Crew:** 4

- **Engine:** MTU 6R106TD21
  - Engine capacity: 1000 h.p.

- **Maximum speed:** 62 km/h

- **Weight:** 16.5 t

- **Armament:**
  - 81-mm self-propelled mortar

- **BTR-3BR** is designed to conduct technical reconnaissance on the battle area day-and-night damaged and unguided vehicles to the nearest hiding or assembling place for damaged cars; carry out load-lifting works.

### BTR-3S
**ARMORED MEDICAL VEHICLE**

Armored medical vehicle BTR-3S is designed for searching, collecting and evacuation of wounded from the battlefield or from the hearth of mass sanitary losses, providing first medical aid. The vehicle can overcome trenches, entrenchments and water obstacles. BTR-3S has medical equipment to provide first medical aid.

- **Dimensions:**
  - Length: 7650 mm
  - Width: 2900 mm

- **Crew:** 4

- **Engine:** MTU 6R106TD21
  - Engine capacity: 1000 h.p.

- **Maximum speed:** 62 km/h

- **Weight:** 16.5 t

- **Armament:**
  - Machine gun: NSVT (KTV-12.7) / 12.7 mm

- **BTR-3S** is designed for searching, collecting and evacuation of wounded from the battlefield or from the hearth of mass sanitary losses, providing first medical aid. The vehicle can overcome trenches, entrenchments and water obstacles. BTR-3S has medical equipment to provide first medical aid.
ARMORED PERSONNEL CARRIERS

BTR-4E
ARMORED PERSONNEL CARRIER

The BTR-4E armored personnel carrier (APC) is an 8x8 wheeled armored amphibious vehicle. The BTR-4E is intended to transport personnel of mechanized infantry units and to provide fire support in combat operations. The APC is used for equipping military units capable of carrying out combat actions under various conditions, including NBC environment.

Armament:
- Automatic Gun: ZTM-1
- Coastal machine gun: KT-7,62
- Caliber: 30 mm
- Grenade launcher: KBA-117 (AG-17)
- Caliber: 30 mm
- Antitank missile complex: complex 252
- Range of fire maximum: 5000 m

Dimensions:
- Weight: 37 t
- Engine: 3TD-3A 252 HP
- Maximum speed: 100 km/h
- Auxiliary power unit: 110 kW
- Dimensions: 7978x2936x3050

Special equipment:
- Air conditioning system with cooling capacity of 10 kW

The BTR-4E APCs can be fitted with the following weapon stations:
- BM-7 “Parus”
- BM “Grom”
- Bau-23x2
- BM “Shturm-M”

Additional protection: provides protection against large-calibre guns and small-calibre automatic guns.

The APC can be used as a basic vehicle for equipping quick-reaction forces and marine corps. The APC can fulfill its tasks day-and-night, under various climatic conditions, on hard-surface roads and off-road. The operating temperature range of the APC is -40 to +55 °C.

BTR-4K
COMMAND VEHICLE

BTR-4K commander vehicle – combat four-axis, amphibious 8x8 vehicle, fitted with armament, armour protection, seats for combat crew (unit commander, driver, weapon station operator and shooters (troopers)). The vehicle is intended for commanding units of land forces, transporting personnel of mechanized units and fire support on the battlefield.

Armament:
- Automatic gun: ZTM-1 / 30 mm
- Machine gun: PKT (КТ-7,62) / 7.62 mm
- Grenade launcher: AG-17 / 30 mm
- Anti-tank missile system: ATMS “Barrier”

Dimensions:
- Weight: 20 t
- Engine capacity: 3TD-3A 252 HP
- Maximum speed: 100 km/h
- Auxiliary power unit: 110 kW
- Dimensions: 7978x2936x3050

Communication devices:

Navigation support systems:
- TNS-9M satellite navigation system, inertial navigation support system, GN-2003 Bazalt portable satellite navigation support system

Portable devices for observation and orientation:
- Aiming circle, binoculars, long-distance night vision device, illuminator
BTR-4MV1
ARMORED PERSONNEL CARRIER

BTR-4MV1 is an armoured amphibious 8x8 all-wheel drive vehicle. The APC is designed as a basic vehicle of the new generation of wheeled armoured vehicles.

Automatic Gun: ZTM-1
Caliber: 30 mm
Coaxial machine gun: KT-7.62
Caliber: 7.62 mm
Grenade launcher: KBA-117 (AG-17)
Caliber: 30 mm
Antitank missile complex: complex 212
Range of fire maximum: 5000 m

Unlike previous similar vehicles (BTR-4) it is equipped with:
- new 3-fan cooling system that makes it possible for the vehicle to operate at the ambient air temperature in the range from -32°C to + 45°C (from -40°C if preheater is installed; up to +50°C with limited power output);
- thermal insulating panels installed on its hull that conceal its pipelines and power lines;
- upgraded trooper seats (headrests, footrests, body side supports, safety belts);
- multifunctional side containers (MFC) to ensure design flexibility due to the customer's requirements (additional protection, additional fuel tanks, water displacement containers);
- LED traffic lights;
- Michelin extra load tyres.

The BMM-4S armored ambulance and recovery vehicle is intended for search, retrieval, before-doctor treatment of the injured, recovery from the battlefield and centre of contamination or destruction as well as transportation of medical equipment, can follow main battle tanks, overcome trenches, ditches and water obstacles on the move.

Intended to conduct technical reconnaissance on the battle area during the day-and-night time; take in tow disabled and damaged operated and unguided vehicles, carry out load-lifting works, the works of welding and support the crew of other vehicles. The vehicle constitutes a modification of the BTR-4 vehicle.

Armament:

- Automatic Gun: ZTM-1
- Caliber: 30 mm
- Coaxial machine gun: KT-7.62
- Caliber: 7.62 mm
- Grenade launcher: KBA-117 (AG-17)
- Caliber: 30 mm
- Antitank missile complex: complex 212
- Range of fire maximum: 5000 m

Main specifications:
- Maximum speed, km/h: 110
- Cruising range, km: 690
- Wheel formula: 8×8

Special equipment:
- Crane equipment with lifting capacity of up to 3 t
- Winch with cable pulling force of up to 6.8 t
- Welding equipment with current intensity of up to 350 A
- Towing devices

BREM-4RM
REPAIR AND RECOVERY VEHICLE

BREM-4RM is an armoured ambulance carrier. The APC is designed as a basic vehicle of the new generation of wheeled armoured vehicles.

Crew: 3
Weight, t: 7.5
Engine capacity, h/p: 449
Power, kW: 320
Transmission: 3200×2932×100
Maximum speed, km/h: 110
Number of places for the wounded, on stretchers and on seats: 16+3
Number of places for the wounded, only on seats: 2
Wheel formula: 4+2 / 10
Cruising range, km: 690

Special equipment:
- Crane equipment with lifting capacity of up to 3 t
- Winch with cable pulling force of up to 6.8 t
- Welding equipment with current intensity of up to 350 A
- Towing devices
**BTR-70**

**ARMORED PERSONNEL CARRIER**

BTR-70 wheeled combat floating machine has weapons, armored protection, high maneuverability for use in mechanized infantry units of ground forces.

- **Crew:** 3+4
- **Weight:** 14.5 t
- **Engine:** FPT IVECO Tector
- **Max. speed:** 11.5 km/h
- **Armament:** KPVT 14.5 mm
- **Dimensions:** 7535x2800x2235

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**BTR-70DI**

**ARMORED PERSONNEL CARRIER**

BTR-70DI Armored Personnel Carrier is a combat floating armored vehicle with all-wheel drive, equipped with the powerful power-plant from two engines FPT “IVECO” Tector (EURO-3). Has high dynamic features, high maneuverability and good motion smoothness and is capable to follow tanks and to surmount trenches and water obstacles immediately.

- **Crew:** 3+7
- **Weight:** 11.5 t
- **Engine:** FPT IVECO Tector
- **Max. speed:** 80 km/h
- **Armament:** KPVT 14.5 mm
- **Dimensions:** 7535x2800x2480

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**BTR-70DI-02**

**COMMAND VEHICLE FOR SVITIAZ FACILITY**

Command vehicle “Svityaz” is intended for providing of forces control and communication in operational-tactical control squad on a move, afloat and on a stop as autonomously, and as the part of a communications center.

- **Main specifications:**
  - **Cruising range on road, km:** 760
  - **Cruising range afloat, hours:** 20
  - **Mark wheels:** КИ-113
  - **Fuel consumption per 100 km on road, l:** 38(19x2)

- **Dimensions:** 7538x2800x2300
- **Crew:** 2+5
- **Weight:** 14.8 t
- **Engine:** FPT IVECO Tector
- **Max. speed:** 80 km/h

---

**BTR-70DI-SV**

**ARMORED PERSONNEL CARRIER**

Chassis vehicle of communication based on BTR-70DI, is a wheeled floating armored vehicle, with all-wheel drive, is equipped with a powerful power-plant which consists of two engines FPT “IVECO” Tector (EURO-3). The vehicle has high dynamic features, high maneuverability and good motion smoothness.

- **Crew:** 3+7
- **Weight:** 11.8 t
- **Engine:** FPT IVECO Tector
- **Max. speed:** 90 km/h
- **Armament:** KPVT 14.5 mm
- **Dimensions:** 7600x3100x2700
- **Crew:** 2+3
- **Weight:** 12.25 t
- **Engine:** FPT IVECO Tector
- **Max. speed:** 100 km/h

---

**Main specifications:**

- **Cruising range on road, km:** 760
- **Cruising range afloat, hours:** 20
- **Mark wheels:** КИ-113
- **Fuel consumption per 100 km on road, l:** 38(19x2)
**BTR-70P**

**ARMORED PERSONNEL CARRIER**

This vehicle is made on the base of a serial armored personnel carrier the BTR-70D, is intended for transportation of staff of special divisions, fire their supports in case of armed resistance, and also carrying out of saving operations.

- **Crew:** 3+7
- **Weight:** 14 t
- **Engine:** FPT IVECO Tector 80
- **Maximum speed:** 13,6 km/h
- **Dimensions:** 7535х2800х2350
- **Armament:** KPVT 14.5 mm, PKT 7.62 mm

**Additional equipment:**
- Armored Medical Vehical manufactured on the base of the BTR-70. AMV is equipped with power-plant which consists of two engines FPT IVECO Tector (EURO-3).
- AMV is intended for medical service and transportation of seriously wounded from hard-to-reach areas, zones of accidents, emergencies, natural disasters and military operations.

- **Crew:** 3
- **Weight:** 12 t
- **Engine:** FPT IVECO Tector
- **Maximum speed:** 60 km/h
- **Armament:** KPVT 14.5 mm, PKT 7.62 mm

**Equipment:**
- CSMV medical military bag
- Emergency doctor’s bag (box)
- PF field complete set for a medical assistant
- Defibrillator
- DP-9 breathing apparatus
- Facility for loading seriously wounded

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**BTR-80**

**ARMORED PERSONNEL CARRIER**

BTR-80 wheeled combat floating machine has weapons, armored protection, high maneuverability for use in mechanized infantry units of ground forces.

- **Crew:** 3+7
- **Weight:** 16 t
- **Engine:** KAMAZ 7403
- **Maximum speed:** 7.62 mm

**Specifications:**
- 7650х2900х2350

**Armament:**
- KPVT 14.5 mm
- PKT 7.62 mm

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**BTR-60PB**

**ARMORED PERSONNEL CARRIER**

BTR-60PB Armored Personnel Carrier is a combat floating armored all-wheel drive vehicle, has high dynamic features, high maneuverability and good motion smoothness and is capable to follow tanks and to surmount trenches and water obstacles immediately.

- **Crew:** 3+7
- **Weight:** 10.3 t
- **Engine:** GAZ-466
- **Maximum speed:** 60 km/h

**Specifications:**
- 7230х2825х2420

**Armament:**
- KPVT 14.5 mm
- PKT 7.62 mm
**DOZOR-B**

**LIGHT ARMORED PERSONNEL CARRIER**

Armored personnel carrier “Dozor-B” is designed to transport, fire support in combat and protection the crew (special forces) from small arms fire. Housing of armored personnel carrier “Dozor-B” is made from armor ARMSTAL 500, which provides protection for the crew according to NATO standards (STANAG) and protects from armor-piercing bullets caliber 7.62-mm, shrapnel of 152-mm high-explosive shells.

- **Machine gun 1**: NSVT (KTM-12.7)
- **Caliber**: 12.7 mm

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**FANTOM**

**UNMANNED, MULTIPURPOSE VEHICLE**

“FANTOM” may be used as an ambulance and rescue vehicle, ammunition supply vehicle, reconnaissance vehicle, fire support vehicle. The current performance of it can execute reconnaissance activities, fire support, be a source of power.

- **Combat weight, kg**: 1000
- **Operational load, kg**: 500
- **Engine**: Deutz BF 4M1013FC
- **Maximum speed, km/h**: 110
- **Dimensions**: 3000x1500x1000
- **Engine**: four stroke four cylinder diesel with turbocharging Deutz BF 4M1013FC capacity 190 hp

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**FANTOM-2**

**UNMANNED, MULTIPURPOSE VEHICLE**

FANTOM-2 may be used as an ambulance and rescue vehicle, ammunition supply vehicle, reconnaissance vehicle, fire support vehicle. The current performance of it can execute reconnaissance activities, fire support, be a source of power.

- **Combat weight, kg**: 2100
- **Operational load, kg**: 2000
- **Engine**: Deutz BF 4M1013FC
- **Maximum speed, km/h**: 110

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**Technical specifications**

- **Machine gun 1**: NSVT / 12.7 mm
- **Machine gun 2**: PKT / 7.62 mm
- **Grenade launcher**: AG-17 / 30 mm
- **ATGM**: Korsar / 100-2500 m
- **Engine**: four stroke four cylinder diesel with turbocharging Deutz BF 4M1013FC capacity 190 hp
- **Automatic transmission**: Allison 1000 SP
- **Independent suspension, torsion bar on wishbone.

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- **Air conditioning system and air cleaning**
- **Ventilation system with forced air circulation and removal of powder gases when firing small arms**
- **Liquid type heating system**
- **Centralized paging wheels system**
- **Communications equipment**
- **Satellite navigation system**
- **Arms of light armored personnel carrier “Dozor-B” allows to inflict damage on enemy manpower, light armored vehicles and as well to carry effective fire on air targets that fly at subsonic speed. The body within is covered with ballistic protection material.**

---

- **Stabilized turntable platform enable to set different types of weapons**
- **Day and night sighting system. Range of sight during the day - 2000 m, night - 1000 m**
- **Remote control system that allows to control arms system independently of driving**

---

- **Housing of armored personnel carrier “Dozor-B” is made from armor ARMSTAL 500, which provides protection for the crew according to NATO standards (STANAG) and protects from armor-piercing bullets caliber 7.62-mm, shrapnel of 152-mm high-explosive shells.**
**BARS-8AR**

**ARMORED VEHICLE OF ARTILLERY RECONNAISSANCE**

BARS-8AR is an armoured vehicle designed for reconnaissance, detection of hostile ground targets, determination of their coordinates, data analysis and transmission of target coordinates to artillery units.

- **Configuration:** 4x4
- **Engines:** 6.7 Cummins Diesel
- **Dimensions:** 6500x2955x3050
- **Protection:**
  - Crew: 6
  - Armoured: 9.5
  - Maximum speed, km/h: 110

** specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crew</td>
<td>6</td>
</tr>
<tr>
<td>Armoured</td>
<td>9.5</td>
</tr>
<tr>
<td>Maximum speed, km/h</td>
<td>110</td>
</tr>
</tbody>
</table>

**Armament**

- Machine gun: 7.62 mm or NSV 12.7 mm

**KRAZ-HULK**

**MULTIROLE OFF-ROAD MINE PROTECTED VEHICLE**

The KrAZ-Hulk is a multirole off-road mine protected vehicle with V-hull used to carry Special Forces personnel, cargoes and equipment.

- **Configuration:** 4x4
- **Power:** Diesel, turbocharged
- **Dimensions:** 6480x2500x2480
- **Protection:**
  - Crew: 8-10
  - Full weight, kg: 13,500
  - Engine: FPT IVECO Tector
- **Armament:**
  - Machine gun: 7.62 mm or NSV 12.7 mm

**specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crew</td>
<td>8-10</td>
</tr>
<tr>
<td>Full weight, kg</td>
<td>13,500</td>
</tr>
<tr>
<td>Engine</td>
<td>FPT IVECO Tector</td>
</tr>
<tr>
<td>Machine gun</td>
<td>7.62 mm or NSV 12.7 mm</td>
</tr>
</tbody>
</table>

**Armored Momentum**

- Power: 390...400 hp
- Top speed, km/h: 80

**Trigon-01**

**LIGHT ARMORED VEHICLE**

The 4x4 lightly-armoured platform is an armoured vehicle with the 4x4 axle configuration, designed for the transportation of military personnel, armor, ammunition, special cargo and light weapons station, communication facilities and special equipment.

- **Configuration:** 4x4
- **Engine:** TAD620VE
- **Dimensions:** 6480x2500x2480
- **Protection:**
  - Crew: 3-8
  - Full weight, kg: 14,000
  - Engine: FPT IVECO Tector
- **Armament:**
  - Machine gun: 7.62 mm
  - Grenade launcher: 40 mm

**specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crew</td>
<td>3-8</td>
</tr>
<tr>
<td>Full weight, kg</td>
<td>14,000</td>
</tr>
<tr>
<td>Engine</td>
<td>FPT IVECO Tector</td>
</tr>
<tr>
<td>Machine gun</td>
<td>7.62 mm</td>
</tr>
<tr>
<td>Grenade launcher</td>
<td>40 mm</td>
</tr>
</tbody>
</table>

**KOZAK 2M**

**TACTICAL ARMORED VEHICLE ON INDEPENDENT SUSPENSION**

Multipurpose armored vehicle, that combines features of military tactical vehicles (like Eagle V or Hawkei) and MRAPs. Based on 4x4 truck Iveco Eurocargo.

- **V-shaped hull and anti-mine seats.**
- **Ballistic protection:** STANAG level 2, mine blast protection STANAG level 3a, 2b.
- **It is intended for a wide range of tasks and can perform auxiliary and direct combat functions.**

**specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full weight, kg</td>
<td>14,720</td>
</tr>
<tr>
<td>Engine</td>
<td>Cummins JV 6.7, turbocharged</td>
</tr>
<tr>
<td>Maximum speed, km/h</td>
<td>14</td>
</tr>
<tr>
<td>Armament</td>
<td>PKMS 7.62 mm or NSV 12.7 mm</td>
</tr>
<tr>
<td>Seating capacity</td>
<td>8-10</td>
</tr>
<tr>
<td>Dimensions</td>
<td>6480x2500x2480</td>
</tr>
</tbody>
</table>
**GPM-72**

**FIRE FIGHTING PANZER**

- Designed for different types of firefighting, using water or foam, transportation fire brigades and technical equipment the place of fire, carrying out rescue operations, arsenals, bases and ammunition deposits, oil wells, clearing passages to the seat of the fire.
- **Specifications:**
  - Fuel consumption on a dirt road, l: 250-350
  - Fuel consumption on a hour pumping unit, l: 60-75
  - Water tank capacity, m³: 20

**BTS-5B**

**UNIVERSAL RECOVERY TANK**

- BTS-5B (BREM "Lion") is designed for technical support on the battlefield, assisting with the emergency evacuation of stuck or sunken tanks and military equipment from the combat zone, BTS-5B performs a wide range of works, including carrying, lifting, digging, welding etc.
- **Specifications:**
  - Dimensions: 7930x3460x2687
  - Crew: 3
  - Weight: 36 tons

**BMR-2**

**ARMORED DEMINING VEHICLE**

- Special tracked Armored Demining Vehicle BMR-2 is designed for demining roads, creation of passages in minefields.
- **Specifications:**
  - Dimensions: 9950x3850x3680
  - Crew: 5
  - Weight: 36 tons

**IMP-2M**

**ENGINEERING DISBARRAGE MACHINE**

- Engineering machine IMP-2M is designed to create passageways, clear blockages and destructions, provide combat troops with engineering, assist rescue operations in zones of mass destruction, and support lifting operations.
- **Specifications:**
  - Dimensions: 9950x3735x3680
  - Crew: 2
  - Weight: 45.7 tons
  - Maximum speed (km/h): 45
  - Operational efficiency:
    - while creating passages: 380-400 m/h
    - in stilled trees: 300-350 m/h
    - when laying convoy paths: 6-10 km/h
    - when moving soil: 250-380 m/h
OTHER WHEELED AND TRACKED VEHICLE

BREM-2
ARMOUR Recovery and Repair Vehicle

The BREM-2 armoured recovery and repair vehicle is intended for:
1. Towing of damaged and faulty BMP-1, BMP-2 vehicles and vehicles developed from them;
2. Pulling of bogged-down vehicles with effort up to 20 tf;
3. Lifting of loads featuring weight up to 1.5 t;
4. Repair and maintenance of BMP-1, BMP-2 vehicles and vehicles developed from them.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engine</strong></td>
<td>6577K3164-52820</td>
</tr>
<tr>
<td><strong>Crew</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Payload</strong></td>
<td>1000</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>6080x3560x3740</td>
</tr>
</tbody>
</table>

MT-LB
CRAWLER TRACTOR

Designed for haulage artillery systems and trailers, transporting people and various loads.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Light, multi-purpose carrier-tracker</td>
</tr>
<tr>
<td><strong>Maximal speed on water (km/h)</strong></td>
<td>5-6</td>
</tr>
<tr>
<td><strong>Cruising range on the road with the main tanks (km)</strong></td>
<td>500</td>
</tr>
<tr>
<td><strong>Combat module</strong></td>
<td>TKB-01-1 complex</td>
</tr>
</tbody>
</table>

BREM ATLET
ARMORED REPAIR AND RECOVERY VEHICLE

The ATLET armoured repair and recovery vehicle is designed to carry out the following works:
1. Recovery and towage of damaged armoured vehicles;
2. Welding and excavation;
3. Transportation of up to 1.5 tonnes of spare parts and consumables.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Winch</strong></td>
<td>Maximum tractive force 250 kN</td>
</tr>
<tr>
<td><strong>Rope operating length</strong></td>
<td>130 m</td>
</tr>
<tr>
<td><strong>Crane</strong></td>
<td>Maximum capacity 25 t</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>Maximum radius 6.8 m</td>
</tr>
</tbody>
</table>

MRV
CASUALTY EVACUATION VEHICLE

Casualty Evacuation Vehicle (CEV) on BMP-1 chassis. CEV is a truck, armored, maneuverable, amphibious vehicle based on BMP-1 armored infantry fighting vehicle chassis. It can be used as
1. armored medical transporter for search and rescue of wounded;
2. armored first aid medical clinic.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special equipment</strong></td>
<td>bandaging table</td>
</tr>
<tr>
<td><strong>Special equipment</strong></td>
<td>inhaler with spare air cylinders</td>
</tr>
<tr>
<td><strong>Special equipment</strong></td>
<td>medical stretchers</td>
</tr>
<tr>
<td><strong>Special equipment</strong></td>
<td>washstands</td>
</tr>
<tr>
<td><strong>Special equipment</strong></td>
<td>complete set of immobilizing splints</td>
</tr>
<tr>
<td><strong>Lock box</strong></td>
<td></td>
</tr>
</tbody>
</table>
BRDM-2I
ARMORED RECONNAISSANCE AND PATROL VEHICLE

BRDM-2I Armored Reconnaissance and Patrol Vehicle is a combat floating wheeled, two-axle all-wheel drive vehicle having high dynamic features, large cruising range, increased cross-country capacity, capable to surmount trenches and water obstacles immediately.

Dimensions: 5750x2350x2310

Crew: 4

Main Specifications:
- KPVT: 14.5 mm
- PKT: 7.62 mm
- AGS-17: 30 mm
- ATGM "Barrier": 5000 m

BRDM-2DI
ARMORED RECONNAISSANCE AND PATROL VEHICLE

BRDM-2DI Armored Reconnaissance and Patrol Vehicle is a combat floating wheeled, two-axle all-wheel drive vehicle having high dynamic features, large cruising range, increased cross-country capacity, capable to surmount trenches and water obstacles immediately.

Dimensions: 5750x2350x2310

Crew: 4

Main Specifications:
- KPVT: 14.5 mm
- PKT: 7.62 mm

BRM-Mongoose
ARMORED RECONNAISSANCE VEHICLE

BRM-Mongoose Armored Reconnaissance Vehicle is a combat floating wheeled, two-axle, independent suspension 4x4, all-wheel drive vehicle having high dynamic features, large cruising range, increased cross-country capacity, capable to surmount trenches and water obstacles immediately.

Dimensions: 5700x2700x2710

Crew: 3

Main Specifications:
- KPVT: 14.5 mm
- PKT: 7.62 mm
- FPT IVECO Tector: 100

PTS-M
AMPHIBIOUS VEHICLE

It is intended for assault water crossing of artillery systems, wheeled and tracked tractors, APCs, manpower and any other cargoes. PTS-M (PTS-2) amphibious vehicle has high level of performance, maneuverability, cross-country ability, has a significant water buoyancy reserve and can be used under the marine conditions with the waves of up to 3 points.

Dimensions: 19800x3300x3710

Crew: 2

Main Specifications:
- On surface: 20 t
- On the water: 12 t
- Engine: 8-46-6
- Maximum speed, km/h: 60
**BMP-1UM IFV**

**INFANTRY FIGHTING VEHICLE**

Infantry fighting vehicle BMP-1UM IFV was designed for the transportation of infantry squad as on the march, as in combat. Through the use of combat module, which includes 30 mm automatic cannon, 30 mm automatic grenade launcher, 7.62 mm machine gun and launcher of antitank guided missiles, fire support, which IFV may provide, is characterized by flexibility, variability and compliance to tactical task.

**Main Specifications:**

- **Crew:** 3
- **Weight:** 14.3 t
- **Engine:** DEUTZ TCD2013
- **Dimensions:**
  - Length: 6735 mm
  - Width: 3150 mm
  - Height: 2450 mm

**Armament:**

- Automatic gun ZTM-2 (2A42) / 30 mm
- Automatic grenade launcher AG-17 / 30 mm
- The launcher to launch ATGM “Complex 212” “Barrier”
- Machine gun KT-7.62 / 7.62 mm

**BMP-2**

**INFANTRY FIGHTING VEHICLE**

The BMP is a second-generation, amphibious infantry fighting vehicle, following on from the BMP-1.

**Main Specifications:**

- **Weight:** 14 t
- **Engine:** 6735x3150x2450
- **Dimensions:**
  - Length: 6735 mm
  - Width: 3150 mm
  - Height: 2450 mm

**Armament:**

- Automatic gun 2A42 (ZTM-2) / 30 mm / 2 pcs
- Machine gun 7.62 mm (PKT) / 2 pcs
- Grenade launcher KBA-117 / 30 mm
- Antitank missile system Barrier – 212 / 4 pcs

**BMP-1UMD IFV**

**INFANTRY FIGHTING VEHICLE**

Infantry fighting vehicle BMP-1UMD is the upgraded version of BMP-1M with the improved tactical and technical characteristics.

**Main Specifications:**

- **Crew:** 3
- **Weight:** 14 t
- **Engine:** DEUTZ TCD2013
- **Dimensions:**
  - Length: 6735 mm
  - Width: 3150 mm
  - Height: 2450 mm

**Armament:**

- Automatic gun ZTM-2 (2A42) / 30 mm
- Automatic grenade launcher AG-17 / 30 mm
- The launcher to launch ATGM “Complex 212” “Barrier”
- Machine gun KT-7.62 / 7.62 mm

**STRAZH**

**FIRE SUPPORT VEHICLE**

Strazh is based on a T-64 main battle tank and is designed to provide armored forces with close-range support and overwhelming firepower against infantry units employing hand held anti-tank weapons.

**Main Specifications:**

- **Weight:** 14 t
- **Engine:** 6735x3150x2450
- **Dimensions:**
  - Length: 6735 mm
  - Width: 3150 mm
  - Height: 2450 mm

**Armament:**

- Automatic gun 2A42 (ZTM-2) / 30 mm / 2 pcs
- Machine gun 7.62 mm (PKT) / 2 pcs
- Grenade launcher KBA-117 / 30 mm
- Antitank missile system Barrier – 212 / 4 pcs
OTHER WHEELED AND TRACKED VEHICLE

KSHM
COMMAND - STAFF VEHICLE

Command - staff vehicle KSHM intended for radio communication and management in the tactical unit of ground troops, battle for control of the regiment (brigade) - Division and for managerial-class units lower (inner mouth-battery - Battalion-Division).

Dimensions:
Length 9200 x Width 2760 x Height 3640

Weight, t: 15.5

Engine: DIESEL

Maintenance workshop MTO is intended for the maintenance of wheeled armored personnel carriers BTR-3, BTR-4, BTR-70, BTR-80 in the field.

Dimensions:
Length 8905 x Width 2728 x Height 3460

Weight, t: 22.7

Body type: FULL METAL, WELDED

Maximum speed, km/h: 80

PC-LBT-02
MOBILE REPAIR SHOP

Field complex PC-LBT-02 is designed to armored vehicles maintenance and repair of wheeled armored personnel carriers BTR-3, BTR-4, BTR-70, BTR-80 in the field.

Dimensions:
Length 8905 x Width 2728 x Height 3460

Weight, t: 15.7

Body type: FULL METAL, WELDED

Maximum speed, km/h: 80

Technical support of machine, on chassis of KrAZ-6322 type with installation of manipulator capacity from 4 to 9 tons

Four modules (one container size - 6058mm / 2438 mm / 2450 mm).

Axle trailer with a diesel - generator 40 kW

Overlap type Alaska (awning fabric on a metal frame).

Floor coverings type Portable Road

Workshop equipment allows to perform the following tasks:
- Communication with the headquarters using HF - radio in the open and closed modes
- Communication with units using VHF - radio stations
- Maintaining settlements and coordinates goals
- Definition of meteorological data over a distance of 25 km
- Leading communication with units at a distance of 3 km

MRM-B
MOBILE REPAIR SHOP

Mobile repair shop MRM-B is intended for dismantling, installation, welding, mechanical and adjustment works, for recharging of batteries in military repair wheeled armored carriers: BTR-3, BTR-4, BTR-60, BTR -70, BTR -80 in the field.

Dimensions:
Length 6970 x Width 2780 x Height 3640

Weight, t: 22.7

Body type: ALL-METAL, WELDED

Maximum speed, km/h: 80

Workshop equipment allows to perform the following tasks:
- Cleaning filters and filter elements of the armored vehicles
- Testing, adjustment and maintenance units, assemblies, mechanisms, systems and gears
- Eliminate minor faults; replace components and assemblies of the propulsion unit
- Chassis components replacement
- Lifting work at replacement of units and other cargo operations

MTO
MAINTENANCE WORKSHOP

Maintenance workshop MTO is intended for the maintenance of wheeled armored personnel carriers, tanks and tracked vehicles for maintenance service T0, T01 and T02 in the field conditions.

Dimensions:
Length 8905 x Width 2728 x Height 3460

Weight, t: 15.7

Body type: FULL METAL, WELDED

Maximum speed, km/h: 80

Workshop performs the following tasks:
- Fuel refueling machines from foreign vessels
- Maintenance filter elements
- Maintenance of electrical and machinery components
- Regulation units, assemblies, mechanisms of machines, systems and com-trol drives
- Carrying out maintenance work of the arms before and after the shooting, equipment shops
**ARMAMENT SYSTEMS**

**TAIPAN COMBAT MODULE**

“Taipan” combat module is designed to engage manpower, vehicles and ground objects with 7.62 mm, 12.7 mm guns, and 30 mm grenade launcher. The module can be mounted on wheeled and tracked vehicles and stationary objects. Management can be performed remotely on a distance.

**Armament:**
- Machine gun 7.62 mm
- Machine gun 12.7 mm
- Grenade launcher 30 mm

**Basic performance:**
- Rate of fire: 2350 rounds/min
- Effective range: 3400 m
- Minimum weight: 350 kg

---

**KASTET COMBAT MODULE**

Combat module “Kastet” is a deep modernisation of combat module “Shkval”. The module is designed for new weapons and modernisation of existing armored vehicles, also for installation on river and sea vessels, fortification installations and others. FCS has in its composition thermal, television and optic channels, laser channel range finding, guidance channel ATGM, stabilizer, digital compass, satellite navigation system, sensors determining the shooting conditions.

**Armament:**
- Automatic gun ZТM-1 (analogue 2А72) / 30 mm
- Anti-tank missile system “Barrier”
- Machine gun KT-7.62 / 7.62 mm
- Automatic grenade launcher 30 mm

---

**DOUBLET COMBAT MODULE**

Module “Doublet” is based on chase device BMP-2, which lets to use it for combat vehicles of this family. Combat module “Doublet” is a lower installation with increased fire power.

**Armament:**
- 2 automatic guns ZTM-2 / 30 mm
- 2 machine guns PKT / 7.62 mm
- 4 launcher of ATGM “Konkurs”
- Automatic grenade launcher AG-17 / 30 mm

---

**BLIK-2M COMBAT MODULE**

Machine-grenade module is designed to engage manpower, vehicles and ground objects with 7.62 mm, 12.7 mm guns, 30mm grenade launcher. The module can be mounted on wheeled and tracked vehicles and stationary objects. Management modules can be performed by remote control on a distance.

**Armament:**
- Machine gun 1 NSV/T / 12.7 mm
- Machine gun 2 PKT / 7.62 mm
- Grenade launcher AG-17 / 30 mm
- ATGM Korsar / 100-2500 m

---
BM-3M “Shturm-M” Combat Module is designed for installation on the light-armored combat vehicles (APC, ICV etc) for fighting against ground and low-flying targets and autonomic usage as immovable firing points for the defense purposes and can be mounted on the sea-crafts turret.

BM-3M “Shturm-M”

- Automatic gun: ZTM-1 /30 mm
- Anti-tank missile system: “Barrier”
- Machine gun: KT-7.62 / 7.62 mm
- Automatic grenade launcher: KBA-117 (AG-17)

SHKVAL Combat Module

SHKVAL Combat Module is an adaptation of combat module “Kastet” under the use of an automatic gun ZTM-2 (analogue) 2A42, which has a smaller ellipse of scattering of shells when firing, than ZTM-1.

FCS has in its composition thermal, television and optic channels, laser channel range finding, guidance channel ATGM, stabilizer, digital compass, satellite navigation system, sensors determining the shooting conditions.

The stabilizer is based on laser gyro and digital servo controllers, which are integrated in the control system by combat module.

BPU-12.7 Combat Module

BPU-12.7 Combat Module is fixed on light armored vehicles and designed to engage light armored vehicles and aerial targets (helicopter) at the distances up to 2000 m in day and night conditions. BPU-12.7 is autonomous, closed, non-stabilized, remote controlled from the operator’s station.

BPU-12.7

- Automatic gun: ZTM-1 / 30 mm
- Anti-tank missile system: “Barrier”
- Machine gun: KT-7.62 / 7.62 mm
- Automatic grenade launcher: KBA-117 (AG-17)

Automatic gun ZTM-1 / 30 mm

Antitank missile system “Barrier”

Machine gun KT-7.62 / 7.62 mm

Automatic grenade launcher KBA-117 (AG-17)
**GROM**

**COMBAT MODULE**

Combat Module GROM with Remote Operated Weapon Systems for light armored fighting vehicles is intended to defeat the manpower, to fight against armored vehicles, fire emplacements and low-flying low-speed targets of the enemy.

**Armament:**
- Automatic gun: ZTM-2 (2A46) / 30 mm
- Anti-tank missile system: 9P135M "Korokurs"
- Machine gun: KT-7.62 / 7.62 mm
- Automatic grenade launcher: AG-17 / 30 mm

**BAU-23X2**

**WEAPON STATION**

BAU-23x2 remote operated Weapon Station is designed for firing at the men power and armored targets both ground and aerial.

**Armament:**
- Gun: 2 x ZTM / 33 mm
- Machine gun: KT-7.62 (PKT) / 7.62 mm
- Smoke screen system: CN3

**PARUS**

**COMBAT MODULE**

"Parus" - remotely controlled combat module, mounted on light armored combat vehicles (armored personnel carriers, infantry fighting vehicles, etc.). "Parus" with characteristics similar to the "Storm", the main structural difference is that the "Parus" does not take place inside the base machine.

**Armament:**
- Automatic gun: ZTM-1 / 30 mm
- ATGM "Complex 212" "Barrier"
- Machine gun: PKT / 7.62 mm
- Automatic grenade launcher: AG-17 / 30 mm

**BM-3S**

**COMBAT MODULE**

Designed for installation on the light- armored vehicles (APC, ICV etc.) for fighting against ground and low-flying targets and self-position usage as immovable firing point for defense purposes and can be mounted on sea-craft’s turret.

**Armament:**
- Automatic gun: ZTM-1 / 30 mm
- Machine gun: KT-7.62 (PKT) / 7.62 mm

**PARUS**

**COMBAT MODULE**

"Parus" - remotely controlled combat module, mounted on light armored combat vehicles (armored personnel carriers, infantry fighting vehicles, etc.). "Parus" with characteristics similar to the "Storm", the main structural difference is that the "Parus" does not take place inside the base machine.

**Armament:**
- Automatic gun: ZTM-1 / 30 mm
- ATGM "Complex 212" "Barrier"
- Machine gun: PKT / 7.62 mm
- Automatic grenade launcher: AG-17 / 30 mm
**3TD**

SERIES OF ENGINES FOR LIGHT WHEELED AND TRACKED ARMORED EQUIPMENT

The 3-cylinder 2-stroke multi-fuel Diesel engines with high supercharging, liquid cooling, direct fuel injection, opposed pistons, in-row cylinder location (cyl. dia. 120 mm, piston stroke 2x120mm).

**5TD**

SERIES OF ENGINES FOR MAIN BATTLE TANKS

Designed for use as a powerplant for battle tanks

**6TD**

SERIES OF ENGINES FOR MAIN BATTLE TANKS

The 6-cylinder 2-stroke multi-fuel Diesel engines with high supercharging, liquid cooling, direct fuel injection, opposed pistons, in-row cylinder location.

**EA10**

AUXILIARY POWER UNIT

Auxiliary power unit is used for supplying direct current electric power for supplying consumers of the vehicle and the other parked transport vehicles.

### Main Specifications

<table>
<thead>
<tr>
<th>Engines</th>
<th>3TD-1</th>
<th>3TD-2</th>
<th>3TD-3</th>
<th>3TD-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>BTR-70, BTR-80</td>
<td>BMP-2, BTR-90</td>
<td>BTR-40-153</td>
<td>BMP-3</td>
</tr>
<tr>
<td>Maximum output using diesel fuel, hp</td>
<td>280</td>
<td>400</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Rotation speed of the crankshaft at max power, rpm</td>
<td>2600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific fuel consumption at maximum power mode, g/hp*h</td>
<td>155-165</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engines</th>
<th>5TDF</th>
<th>5TDFM</th>
<th>5TDFMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>T-64 tank</td>
<td>BM Bulat, T-55, T-62, T-64</td>
<td>T-55, T-62, T-64</td>
</tr>
<tr>
<td>Maximum output using diesel fuel, hp</td>
<td>700</td>
<td>850</td>
<td>1150</td>
</tr>
<tr>
<td>Rotation speed of the crankshaft at max power, rpm</td>
<td>2800 min-1</td>
<td>2800 min-1</td>
<td>2850 min-1</td>
</tr>
<tr>
<td>Specific fuel consumption at maximum power mode, g/hp*h</td>
<td>178</td>
<td>167</td>
<td>165</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>1040</td>
<td>1040</td>
<td>1080</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Engines</th>
<th>6TD-2</th>
<th>6TD-1</th>
<th>6TD-1R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>BM Bulat</td>
<td>T-60, T-72</td>
<td>BREM</td>
</tr>
<tr>
<td>Maximum output using diesel fuel, hp</td>
<td>1200</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Rotation speed of the crankshaft at max power, rpm</td>
<td>2600 min-1</td>
<td>2800 min-1</td>
<td>2800 min-1</td>
</tr>
<tr>
<td>Specific fuel consumption at maximum power mode, g/hp*h</td>
<td>160</td>
<td>158</td>
<td>158</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>1180</td>
<td>1180</td>
<td>1210</td>
</tr>
</tbody>
</table>

### Auxiliary Power Unit

- **Generator terminal rated output, kW:**
  - under standard conditions: 10 kW
  - at the altitude:
    - 1000 m: 9 kW
    - 2000 m: 8 kW
    - 3000 m: 7 kW

**Main Specifications:**
**DUPLET**

**EXPLOSIVE REACTIVE ARMOR ELEMENTS**

Explosive Reactive Armor Elements are designed for protection from unitary and tandem cumulative threats, subcaliber armor piercing shells and "cannonball" type ammunition.

- **Main Specifications**
  - Reduction of the armor piercing capability of the unitary RPG grenades: 80 – 90 %
  - Reduction of armor piercing capability of armor piercing feathered subcaliber shells: 80 – 90 %
  - Operational reliability: 100 %
  - Weight of 1m² of protection: 400 - 515 kg

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**BAR ARMOR**

**DEFENCE SYSTEM**

The bar armor system is a modular, lightweight, and low-cost bar armor defense system for military vehicles, providing full-vehicle passive protection effective against rocket-propelled grenades (RPGs).

- Lightweight aluminum construction.
- Modular design - easily configurable to any vehicle.
- In-the-field installation and maintenance.
- Removable or collapsible for tight maneuvering or for shipping.
- Preserves hull integrity – no drilling or welding.
- Easy access and emergency exit for crew.

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**ZASLON**

**ACTIVE PROTECTION SYSTEM (APS)**

Zaslon active protection system is designed to protect stand-alone fixed or moving targets against antitank weapons of all types, including hand-held antitank grenade launchers, anti-armor projectiles, ATGW missiles, and armor-piercing and shaped-charge artillery rounds approaching their targets at 70 to 1,200 m/s. ZASLON detects incoming threats at shortest required ranges, provides enhanced countermeasures resistance, is almost 'invisible', and operates with a high degree of efficiency on the battlefield.

- **Main Specifications**
  - Installation object: BMP, BTR
  - Mass, kg: 50-130 (weight of single module)
  - Detection: Radiolocation
  - Type of intercepted means of defeat: AGMW, RPG, COP, BOPS
  - Action speed, s: 0.001-0.005

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**SHERSHEN**

**ACTIVE PROTECTION SYSTEM (APS)**

Active Protection System for light armored vehicles "SHERSHEN" is designed for protection of stationary and moving carriers from anti-tank unitary and tandem kinetic and cumulative threats.

- **Main Specifications**
  - Protection type: Active multifunctional
  - Min. effective distance to the threat: 20 m
  - Reaction time: 0.001 – 0.006 s
  - Possibility to be combined with ERA: Can be combined with all ERA types
  - Weight of one module with armor: Up to 50 kg
DAY-TIME OBSERVATION DEVICES


Designed for road and terrain observation when driving armored vehicles.

**Main Specifications**

- **Viewing field angle, in planes, deg, not less than:**
  - Horizontal: 78 71 118 108 91 140 116 69 138
  - Vertical: 28 33 54 29 19 36 42 20 34
  - Viewing field angle in vertical plane, deg, not less than:
    - Upper: 12 12 35 9 12 16 15 9 16
    - Lower: 19 21 19 20 11 17 29 9 17
  - Field of view angle, in planes, deg, not less than:
    - Horizontal: 36 34 45 42 44 52 49 32 –
    - Vertical: 5 7 12 5.30 5.5 6 8.5 5.16 7
  - Binocular viewing field angle in horizontal plane, deg, not less than:
    - 12 9 10 11 14 10 14 9.5
  - On-axis beam deflection angle, deg, not less than: – 19 – – – 45 ± 2 – – –
  - Device periscope effect, mm: 160 165 – 114±6 162±6 65±4 113±6 190±10 173±6
  - Visual coefficient of transmission, not less than: 0.44 0.68 0.60 0.44 0.44 0.6 0.6 0.43 0.46
  - Weight, kg, not more than: 3.4 2.85 2.35 2.8 2.9 0.74 2.26 3.4 7.5
  - Operating temperature range, °C: from −50 to +50

**NIGHT VISION DEVICES**

*TVNE-4BM, TVNE-1BM, TVNO-2BM, TVN-5M*

Designed for giving the possibility to drive armored vehicles at night both under conditions of up to $5 \times 10^{-3}$ lux natural night luminosity (in passive mode), and with headlamp light (covered by the infrared filter) used (in active mode).

**Main Specifications**

- **Magnification**
  - ×1
  - Field of view, deg, in planes:
    - Horizontal: 35 35 30 40
    - Vertical: 33 33 30 30
    - Road distance visibility in modes, m, not less than:
      - Active: 60 60 50 150
      - Passive: 100 100 – 450
    - Supply voltage from vehicle-borne DC mains, V: 27 27 27 27
    - Power consumed, W, not more than:
      - With heating: 50 90 50 95
      - Without heating: 6 3 6 5.5
    - Weight, kg, not more than: 3.9 4.2 4.1 6
    - Operating temperature range, °C: from −50 to +50
Guidance unit with thermal imager is designed to form a target video signal as well as to create a space-time structure of laser information field at a programmed distance to control a missile. It can also detect thermal radiation of objects and terrain when thermal imager is installed.

LimpidArmor

Circular review system for armored vehicles consists of helmet with integrated HoloLens glasses (glasses of reality augment (Microsoft corp.), box of cameras (optical and thermal camera mode), located on the sides of armored vehicles and LimpidArmor software. The solution could be used for any armored vehicles and would provide 360° review video with high resolution in real-time.

- Review of 360° (optical and thermal imaging modes) at a distance of 300 meters;
- Streaming video without delay;
- Highlighting “allies” and identified “enemy” positions;
- “look - lock - launch” system;
- Automatic target tracking;
- Control of the military vehicles “with closed hatches”;
- Telemetry internal systems of armored vehicle, interactive elements and tips in helmet;
- System of early attack ATM warning;
- Ability to “hot” integration with standard equipment of armored vehicle;
- Possibility of receiving video or targeting of the UAV system or other sources;
- Integration of perspective automated systems as understanding of the situation and reflection of the general operational situation on the battlefield.

OptoElectronic Devices

Is designed to register target environment and to measure range in natural and poor illumination conditions as well as to detect thermal radiation of objects and terrain. It is a component part of a light weapon station which can be installed on armored vehicles. Contains a number of modern devices, the most widely used among which are: OEP, OEP-V, OEP-VM / armored vehicles Dozor-B, Tryton-01/, PM-U / the combat module SARMAT/ etc.
### BTR-3E1
**Integrated Crew Training Simulator**

- **Use of the simulator during APC’s crew training.**

**Main Specifications:**
- **Endurance:** no more 4 h
- **Time of interval:** no less 1 h
- **Readiness time:** no more 30 min
- **Weight:** no more 2200 kg
- **Alternating current network:** 380/50, 220/50 V/Hz

### BTR-4
**Integrated Crew Training Simulator**

- **Use of the simulator during APC’s crew training.**

**Main Specifications:**
- **Endurance:** no more 4 h
- **Time of interval:** no less 1 h
- **Readiness time:** no more 30 min
- **Weight:** 3100 kg
- **Alternating current network:** 380/50, 220/50 V/Hz

### BMP-2
**Integrated Dynamic Training Simulator**

- **The simulator enables drill of the following tasks:**
  - studying common equipment, positioning of devices and tools of controls of the vehicle;
  - mastering the tools and controls of the vehicle;
  - drilling the pre-start and start operations of the car in winter and summer;
  - drilling the movement techniques off the spot, switching transmission, turns, all types of brakes;
  - driving the vehicle in any landscape of the 3D training ground with option of appropriate engine mode;
  - drilling the techniques to negotiate natural and man-made obstacles;
  - working out the fire control skills.

**Main Specifications:**
- **Total weight:** 4.1 t
- **Consumed power:** 12 kW
- **Time of readiness:** 5 min
- **Endurance:** 10 h
- **Seats:** 3 men.

### T-64B
**Integrated Dynamic Tank Crew Training**

- **The use of the tank simulator for the crew training with no quality training drawbacks as compared to training procedures on the tank directly provides the following merits:**
  - Form efficient skills in the trainee’s action;
  - Prevent accidents in the course of the tank crew training;
  - Exclude damage of fighting vehicles at wrong trainee’s actions due to saving the fuel, service life of fighting vehicles and ammunition;
  - Carry out the training both for the whole crew and individually for a driver, a gunner and commander on the individual base.

**Main Specifications:**
- **Total weight:** 4.1 t
- **Consumed power:** 12 kW
- **Time of readiness:** 5 min
- **Endurance:** 10 h
- **Seats:** 3 men.