

State Enterprise Specialized Foreign Trade Firm PROGRESS





8

ARMORED MILITARY VEHICLES



WE DO:

- production of
 - I heavy and light armored vehicles
 - multi-purpose systems and devices
 - engines, units and aggregates
- repair and upgrade
- maintenance and repairing equipment
- simulators





MAIN BATTLE TANK

Main battle tank «Oplot» is intended for combat operations in offensive operations 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.



Dimensions:

9720x4176x2800





Weight: 51 t



Engine: diesel engine 6TD-2



Maximum Speed: 70 km/h

Oplot can be almost unnoticeable at battlefield:

- smokeless mode of engine start
- making of smoke curtain
- motor-transmission section has heat insulating cover, which decrease thermal visibility
- ■anti-radar coverage of the tank
- rubber shields on the front part of the turret
- protective nets set



AI IIIIIIOIIC		
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 Glonas and Navstar systems. Communication facilities provide control at the distance up to 50 km, with additional antenna – up to 350 km.

■ Tank turret rotate

on 180 deg by 5 sec. ■ **125mm gun has:**

armour-piercing, cumulative and high-explosive fragmentation shells

New combined armour with several layer of armoured plates and ceramic material, mounted dynamic protection "Nizh" type

exceeds armour of competitors.



- pipe 120 mm caliber;
- communication system (communication facilities) of customer;
- Air-conditioner;
- additional power generator;
- camouflage modifications

Special difference of Ukrainian tank "Oplot" has:

- powerful two stroke diesel engine 6TD-2 (1200 hp, 883 kW);
- combined system for moving control;
- digital board for driver-mechanic;
- dynamic protection of new generation;improved level of tank side security;
- sight of commander;
- up-to-date aiming and observation devices;
- ability to fire with guided missile through barrel;
- automatic loading mechanism;
- anti-aircraft machine gun of closed type.



YATAGAN

MAIN BATTLE TANK

Designed for support of military troops on the battle field, to overcome layered defence of an enemy, water obstacles and swamped areas, quick reaction for counterstrike of an enemy and carrying out other missions.



Dimensions: 9720x3775x2285



Crew 3



Weight: 48,5 t



Engine capacity: 1200 h/p



Maximum Speed: 70 km/h



Armament:

Gun	120 mm
Coaxial machine gun	7,62 mm
Anti-aircraft machine gun	12,7 mm



Armament:

10 mamona	
Gun	KBA-3 or 2A46M-1
Caliber	125 mm
Coaxial machine gun	KT-7,62 or PKT
Caliber	7,62 mm
Anti-aircraft machine gun	KT-12,7 or NSVT-12,7
Caliber	12,7 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: 25x3600x2172	922
	Crew: 3	



Weight: 39 - 42,5 t. Engine:



Maximum Speed: 60,5 km/h





BULAT

MAIN BATTLE TANK

The Bulat BM main battle tank is an upgrade of the T-64B. The purpose of upgrade is the significant enhancement of the tank specifications.

It is intended to be used to support troops during the fight, overcome deeply echeloned battle enemy order, overcome water obstacles and swamps, rapid counteraction the enemy counter-offensive and perform other tasks.





Dimensions:

9295x3560x2184



Crew:



Weight: 45 t



Engine: diesel engine 6TD-2



Maximum Speed: 70 km/h

Armament:

Gun	KBA-3 or 2A46M-1
Caliber	125 mm
Coaxial machine gun	KT-7,62 or PKT
Caliber	7,62 mm
Anti-aircraft machine gun	KT-12,7 or NSVT-12,7
Caliber	12,7 mm

The modernization is carried out in three main directions:





T-72AG

UPGRADED TANK

T-72AG tank is combat tracked vehicle, which has powerful missile-artillery armaments, reliable armored protection and high maneuverability. It is intended to accomplish wide scope of tasks and is capable to defeat tanks and other armored objects of enemy, manpower, anti-tank and artillery means etc.



Dimensions: 9500x3600x2226



Crew:



Weight: 49.5 t



Engine: 6TD-2, diesel, 1200 hp



Maximum Speed: 70 km/h



Armament:

2A46M, with thermal cover		
125 mm		
9M119		
PKT		
12,7 mm		
NSV-12,7		
12,7 mm		

T-72-120

UPGRADED TANK

The main offensive power of land forces, intended for combat actions in case of direct fire contact with an enemy.



3
Weight: 48,5 t

Dimensions: 9725x3660x2795

Engine capacity: 1200 hp

Maximum Speed: 65 km/h



Gun	120 mm
Coaxial machine gun	7,62 mm
Anti-aircraft machine gun	12,7 mm



T-55AGM

UPGRADED TANK

Designed for support of military troops on the battle field, to overcome layered defence of an enemy, water obstacles and swamped areas, quick reaction for counterstrike of an enemy and carrying out other missions.



9853x3560x3004





Weight:





Engine capacity: 850, 1000 hp



Maximum Speed: 70 km/h



Armament:

Gun	125 mm
Coaxial machine gun	7,62 mm
Anti-aircraft machine gun	12,7 mm

T-55AM

UPGRADED TANK

Designed to accomplish combat missions in offensive and defensive actions, as a mass efficient means of active military operations on land in conventional and nuclear war conditions.



9000x3536x2226



Dimensions:

Weight: 41,5 t +1,5%



Engine: V-46-5M, 690 hp



Maximum Speed: 50 km/h



Armament:

rifled gun barrel with ThermoJacket	100mm
Anti-aircraft machine gun	DShKM





BTR-4MV

ARMORED MEDICAL VEHICLE

Troops: 3+7(9)



Engine type: 4-stroke diesel DEUTZ BF 6M 1015 CPR



Maximum Speed: 110 km/h



Main Specifications:

Options	unit of measurement	Value
with bulletproof protection	t	21.9 + 0.66
with additional protection	t	23.55 + 0.7
Wheel formula		8x8
Crew	people	3 (commander, operator, driver)
Troopers	people	7*9 (depending on the module and version used)
mark		ZTM1 or ZTM2
caliber	mm	thirty
ammunition	mm	408
mark	mm	KT-7.62 or PKT
caliber	mm	7.62
ammunition	PC.	1500
mark	mm	KBA-117 or AG-17
caliber	PC.	thirty
ammunition		87
mark		240
ammunition	PC.	4
with bulletproof protection	hp/t	22.83
with additional protection	hp / t	21.27
on the highway	km / h	110
afloat	km / h	to 10
Max. Lifting angle	degrees	thirty
Max. Roll angle	degrees	25
mark		4-stroke diesel DEUTZ BF 6M 1015 SR
power	hp	449



BTR-4 is designed to transport personnel of motorized infantry units and their fire support in combat. BTR is used to equip units capable of fighting in various conditions, including in conditions of the enemy using weapons of mass destruction. The APC can be the basic vehicle for equipping the special rapid reaction forces and marines. An APC can perform assigned tasks both in the daytime and at night, in different climatic conditions, on roads with various coatings and in conditions of total impassability. Operating temperature range from -40 to +55 ° C.

BTR-4

ARMORED PERSONNEL CARRIER

The BTR Armored Personnel Carrier (APC) is designed for transportation of infantry unit personnel and fire support providing in the combat. This APC is used for equipping units able to fight in various conditions, including NBC environment.



Al-manight.		
ZTM-1		
30 mm		
KT-7,62		
7,62 mm		
KBA-117(AG-17)		
30 mm		
complex 212		
5000 m		







Landing forces: 7-9



Modification mass: 17,5 t +3% with anti shot protection 25 t+3% with additional protection



Engine: 2-stroke diesel engine 3 TD



Maximum Speed: 100 km/h



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



The BTR-4 APCs can be fitted with the following weapon stations



«Grom» remote-controlled weapon station



Bm-3 «Shturm» remote-controlled weapon station



Bau-23x2 remote-controlled weapon station



Bm-7 «Parus» remote-controlled weapon station

Additional protection:

against fragment of large-caliber projectiles

■ Type and designation of engine: IVECO Cursar C 10 ■ Maximum power 316 (430) kW (hp)

■ Transmission automatic, hydro-mechanical

■ Number of gears 5 forward gears + 1 reverse gear

■ Navigation system SN-3003 Bazalt satellite system

ARMORED MILITARY VEHICLES

ARMORED PERSONNEL CARRIERS



BTR-4K

COMMAND VEHICLE

The BTR-4 is intended to transport personnel of mechanized infantry units and to provide fire support in combat. Command Vehicle is a modification of the BTR-4 Armored Personnel Carrier.



Dimensions: 7650x2900x2350



Crew: 7 (commander, driver, gunner, unit commander, three officers)



Weight: 20,2 t +3%



Engine: 2-stroke diesel engine 3 TD



Maximum Speed: 100 km/h



Auxiliary power unit: EA-8



Armament:

in mamond	
Automatic Gun	ZTM-1
Caliber	30 mm
Machine gun	PKT-7.62
Caliber	7,62 mm



BTR-4KSH

COMMAND AND STAFF

The BTR-4 is intended to transport personnel of mechanized infantry units and to provide fire support in combat. Command and Staff Vehicle is a modification of the BTR-4 Armored Personnel Carrier

Dimensions: 7650x2900x2350



Crew: 7 vehicle commander, driver (electrician and mechanic), commander, four officers



weight: 18,5 t +3%



Engine: FPT IVECO Tector



Maximum Speed: 100 km/h



Auxiliary power unit: EA-8



Special equipment:

Communications devices:

T-173M radio set, 173PM radio receiver, R-163-50K radio set, R-163-KP radio receiver, R-159 radio set, Severok-K radio set, oral and written information cryptographic protection equipment, TA-57-U telephone set, TK-2 telephone spool

Navigation support systems:

TIUS-NM satellite navigation system, inertial navigation support system, SN-3003 Bazalt portable satellite navigation support system

Portable devices for observation and orientation:

Aiming circle, binoculars, long-distance night vision device, illuminator



BTR-3E1

ARMORED PERSONNEL CARRIER



The BTR - 3E1 Armored Personnel Carrier intended to transport mechanized infantry units and to provide fire support in combat operations. It can be used as a basic vehicle forequipping forces quick-reaction marine units. The APC can operate day-and-night, under various climatic conditions, on hard-surface roads, off-road, and in NBC environment.

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

Dimensions: 7850x2900x2774



Crew: 3 + 10



Weight: 16 t.



Engine: MTU 6R106TD21



Armament:

■ "Shturm" combat module ■ or "Shturm-S" combat module

Airtight and waterproof armored carrying hull is a basis of the vehicle

of a very hard steel and is reinforced with Kevlar from The hull provides protection against 7.62mm bullets and it is possible to improve the protection level up to the level resisting to 12.7mm

structure. The hull is made



in the airtight and waterproof hull which protects them against nuclear radiation, chemical and biological effects.

The crew is accommodated

- The number of hatches designed for boarding and dismounting of the crew is 6.
- The design of the armored hull and running gear provides high-level protection against explosion after hitting an antitank mine.
- The number of ports designed for firing from personal weapons is 8.

Auxiliary Equipment:

- Pull winch (force, t) 6
- Firefighting system (type) Automatic
 Filtration unit (type) With full-flow filter

bullets.

- Heater (heating efficiency, kW) 18
- Air conditioner (cooling efficiency, kW) 10
- Engine (type and model): Diesel, MTU 6R106TD21 or DEUTZ BF6M 1015
- Power output, h.p.: 326
- Transmission: Automatic, Allison Transmission 3200 SP



BTR-3M1

81-MM SELF-PROPELLED MORTAR

Intended for direct fire support of infantry subunits, is capable to follow tanks, on the move overcome entrenchments, trenches and water obstacles.



Dimensions: 7850x2900x2600



Crew:



Weight: 16,5 t



Engine: MTU 6R106TD21



Maximum Speed: 100 km/h

Machine gun Caliber



Armament:

Main armament	81-mm mortar
Machine gun	NSVT (KT-12,7)
Caliber	12,7 mm

BTR-3M2



NSVT (KT-12,7)

12,7 mm

Intended for direct fire support of infantry subunits, is capable to follow tanks, on the move overcome entrenchments, trenches and water obstacles.





Weight: 16,5 t



Engine: MTU 6R106TD21











BTR-3E

ARMORED PERSONNEL CARRIER

The BTR – 3E is armored carried vehicle intended for transportation of personnel of motorized infantry sub-units and its firing support in combat conditions.



Dimensions: 7650x2900x2860







Weight:



16 t



Engine: UTD-20 (diesel), 300hp



Maximum Speed: 85 km/h



Armament^{*}

Al Illulione	
Automatic Gun	ZTM-1
Caliber	30 mm
Machine gun	KT(PKT)
Caliber	7,62 mm
Grenade launcher	AG-17
Caliber	30 mm
Anti-tank guided missile	«Barrier»



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, on the move overcome trenches and water obstacles.

Automatic gun	ZTM-1
Caliber	30 mm
Machine gun	PKT (KT-7,62)
Caliber	7,62 mm
Grenade launcher	AG-17
Caliber	30 mm
Anti-tank missile system	ATMS «Barrier»

MTU 6R106NĎ21



Dimensions: 7850x2900x2774

ARMORED PERSONNEL CARRIERS



BTR-3RK

COMBAT VEHICLE WITH ATGM

Combat wheeled amphibious vehicle with armored protection, high level of mobility and armament (including control complex), it is able rapidly identify, recognize and destroy ground-based (as well as armored) and low-flying targets with high efficiency, and intended to transport mechanized infantry units. Armored personnel carrier is to follow tanks, on the move overcome trenches and water obstacles.



Dimensions: 7850x2900x2774





Weight: 16,5 t



Engine: MTU 6R106TD21



Maximum Speed: 100 km/h



Armament:

Main armament	Anti-tank missile system
Auxiliary armament	Turret machine gun mount
Machine gun	NSVT -12,7
Caliber	12,7 mm

BTR-80UP



BTR-80UP is intended to transport personnel of mechanized infantry units and to provide fire support.

Armament

/u mamona	
Machine gun	KPVT
Caliber	14,5 mm
Machine gun	PKT
Caliber	7,62 mm

Dimensions: 7650x2900x2350 Weight: 13,6 t Engine: FPT IVECO Tector







BTR-3S

ARMORED MEDICAL VEHICLE

BTR-3S Armored Medical Vehicle is intended to search and evacuate wounded men from fires of mass defeat and provide them with medical service (including first aid during transportation) under different natural-climatic conditions and during any time of the year, day and night, and also to be used as mobile bandaging room.





Armament:

The self-powered open antiaircraft-machine-gun installation	
Machine gun	NSVT (KT-12,7)
Caliber	12,7 mm

Quantity of places for transportation of wounded men:

Lightly wounded (in a sitting position)	6
Critically wounded patients (on a litter)	4

BSEM-4K

CASUALTY EVACUATION VEHICLE

Intended for searching and evacuation of wounded from mass destruction places and medical service providing (incl. first aid during transportation) in different time and season as well as to use as mobile bandaging room. The vehicle constitutes a modification of the BTR-4 vehicle.





ARMORED PERSONNEL CARRIERS



BREM-4K

REPAIR AND RECOVERY VEHICLE

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.



Dimensions: 8200x2932x3100





Weight: 19 t + 3%



Engine: 2DT-AB



Maximum Speed: 100 km/h



■ 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 350A

■towing devices

BTR-3U1

ARMORED PERSONNEL CARRIER

Combat wheeled amphibious vehicle with armored protection, high level of mobility and armament (including control complex), it is

able rapidly identify, recognize and destroy ground-based (as well as armored) and low-flying targets with high efficiency, and intended to transport mechanized infantry units. Armored personnel carrier is to follow tanks, on the move overcome trenches and water obstacles.



AI IIIIIIIIIIII	
Automatic gun	ZTM-1
Caliber	30 mm
Coaxial machine gun	KT-7,62(PKT)
Caliber	7,62 mm
Combat module	BM-3S

Dimensions: 7850x2900x2775 Weight: 16 t

> Engine: UTD-20

Maximum Speed: 80 km/h









BTR-3BR

ARMORED REPAIR AND RECOVERY VEHICLE

BTR-3BR Armored Repair and Recovery Vehicle is 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 to the nearest hiding place or assembling place for damaged cars; carry out load-lifting works with moving a cargo.



Dimensions: 7850x2900x2800





16,5 t



MTU6R106ND21



Maximum Speed: 100 km/h



Armament:

The open antiaircraft-machine-gun installation	
Machine gun	NSVT (KT-12,7)
Caliber	12,7 mm

Crane equipment:

Boom full-circle slewing crane with a hydraulic drive and remote control		
Load capacity, кН (hardware)	20 (2)	
Working radius, m	5	



BTR-3U

ARMORED PERSONNEL CARRIER

Combat wheeled amphibious vehicle with armored protection, high level of mobility and armament (including control complex), it is able rapidly identify, recognize and destroy ground-based (as well as armored) and low-flying targets with high efficiency, and intended to transport mechanized infantry units. Armored personnel carrier is to follow tanks, on the move overcome trenches and water obstacles

а	m	114	m	10	nt

Automatic cannon	KBA-2, (ZTM-1 or 2A72)
Caliber	30 mm
Grenade launcher	AG-17
Caliber	30 mm
Coaxial machine gun	PKT
Caliber	7,62 mm

Dimensions: 7850x2900x2928 Weight:

> Engine: UTD-20



16 t





BTR-70DI-02

TRANSPORTATION BASE FOR 'SVITIAZ' FACILITY

'Svitiaz' is intended for provision of command and control over the troops, organization of communications within the operational-tactical level of command in motion, afloat and at stop, both independently and as part of the communications node.



Dimensions: 7535x2800x2300



2 + 3



Weight:



12,25 t Engine:



FPT IVECO Tector



Maximum Speed: 100 km/h



BTR-70DI



ARMORED PERSONAL CARRIER

It is intended for transportation of mechanized unit personnel and for its fire support. The Armored personnel carrier can be equipped with various types of armament.

Armament:

Mount type	turret, machine gun
Machine gun	KPVT
Caliber	14,5 mm
Machine gun	PKT (KT)
Caliber	7,62 mm



ARMORED PERSONNEL CARRIERS

ARMORED MILITARY VEHICLES



Armament:

Machine gun	NSVT (KT-12,7)
Caliber	12,7 mm

DOZOR-B

ARMORED VEHICLE

Light armored personnel carrier DOZOR-B is designed to protect the crew and troops from small arms fire, shrapnel and mines namely: from 7.62-mm armor piercing bullets at distance 30 meters and from shrapnel of 150 mm high-explosive shell which exploded at distance 50 meters.

> Dimensions: 5600x2400x2700



3+8



Weight: 8,45 t



Engine: DEUTZ BF4M 1013FC



Maximum Speed: 120 km/h



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 such as «Kevlar».

Turret machine gun unit with remote control MGU-12,7, with a television camera, thermal vision cameras and laser rangefinder. Television camera with wide and narrow field of view. The spectral operating range of thermal imaging cameras 8-12 microns. The wavelength of the laser rangefinder is 1.06 microns. Ammunition—150 bullets. Aiming angles vertically-from -5° to + 60°, by the horizon-360°.



■ Automatic transmission Allison LCT 1000

■ Independent suspension, torsion bar on wishbone.

The vehicle is equipped:

- air conditioning system and air cleaning
- ventilation system with forced air circulation and removal of powder gases when firing small arms
- liquid type heating systemcentralized paging wheels system
- communications equipment
- satellite navigation system
- winch with a pulling force of 4100 kg



KOZAK II

LIGHT ARMOURED VEHICLE



Dimensions: 7050x2500x2610



Seating capacity: up to 11



Full weight: 15000 kg

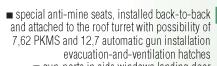


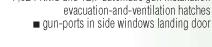
Engine type: lveco, 5,9 litres turbodiesel



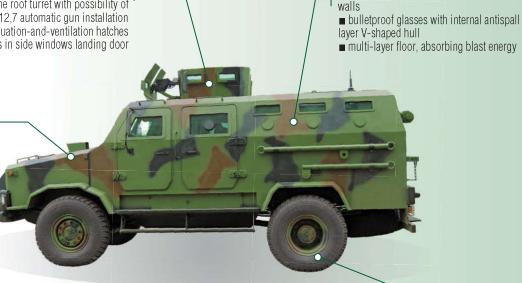
Main Specifications:

Base chassis	Iveco Eurocargo 4x4
Wheel arrangement	4x4
Power, h.p.	279
Torque, Nm	950
Clearance, mm	392
Turning radius, m.	8,0
Transmission	ZF, mechanical 6-speed with synchronizers
Ballistic Protection	2 (according to STANAG 4569)
Blast Protection	la,lb (according to STANAG 4569)





- front and rear ram bumpers electrical winch ■ preparation for all special devices
- (radiostation, navigation device etc.) front-view camera with night vision
 - rear-view camera parktronic intercom



Wheels are equipped by «run-flat» that allows to move with penetrated tires air conditioner

■ special alloyed armor steel as major

protection material antispall layer in all side



BARS-6

ARMORED PERSONNEL CARRIER

Multipurpose 4x4 APC with the best off road capability. Meets high standards quality, so that was specifically developed for military purposes.



Dimensions: 2200/5500/2400



Troops: 6+3



Gross weight: 5650 kg



Engine type:



Maximum Speed: 100 km/h



Main Specifications:

4 x 4
5MT
130/2900
370/1600
1650
36x12,50R16. 5LT
CEN level BR6
3200
25
60%
20 %
40 %
760 mm
500 km
-35 / +50



- Strong and reliable chassis frame
- Roof-mounted 360' traversing turret with perimeter protection 7.62 mm Caliber PKM gum mount assembly

 Ballistic steel-case fuel tank
- protection
- Heavy duty front and rear ram bumpers
- Strengthened suspension - reinforced as necessary to compensate for additional weight of the vehicle



BARS-8

ARMORED PERSONNEL CARRIER



BARS - 8 - Ukrainian multi-purpose APC with 4×4 wheel formula, designed to perform tactical tasks, defend checkpoints and to conduct combat operations in urban areas.

> Dimensions: 2200/6000/2400



Troops: 8+2(3)



Gross weight: 8000 kg



Engine type: 6,7 Cummins /V8/ Turbo diesel

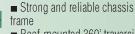


Maximum Speed: 110 km/h



Main Specifications:

main opeomeationer			
Drive configuration	4 x 4		
Transmission	6AT/6MT Aisin		
Horsepower/rev	385/2900		
Max. torque/H.m/rev	1173/1600		
Payload, kg	2 000		
Tires, type	40x13.50R1		
Armoring level	CEN level BR6		
Armor defence	360 ° ballistic protection from 5,45 mm, 7,62 mm bullets		
Wheelbase, mm	3 670		
Ground clearance, mm	280		
Flotation	road clearance 280 mm		



- Roof-mounted 360' traversing turret with perimeter protection 7.62 mm Caliber PKM gum mount assembly ■ Ballistic steel-case fuel tank
- protection
- Heavy duty front and rear ram bumpers
- Strengthened suspension - reinforced as necessary to compensate for additional weight of the vehicle





FRITON - 01

LIGHT ARMORED VEHICLE

The 4 x 4 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.



Main Specifications:

Swimming speed	up to 10 km/h		
Endurance range	700 km		
Weapon:			
∎ machine gun	12.7 mm		
grenade launcher	40 mm		
Ammunition load:			
■12.7 mm 50/100 shots (opti	on of 200)		
■ 40 mm 32 shots			
Weapon station weight	300 kg		

Combat crew: 3+8



Total weight: up to 8 t

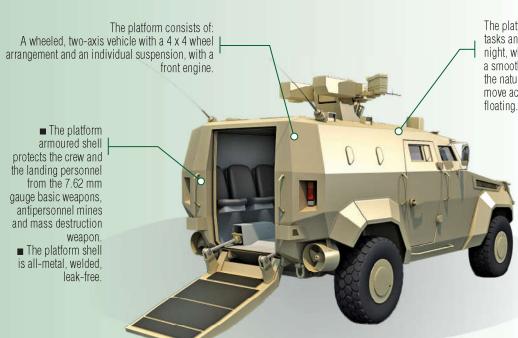


Engine type: TAD620VE diesel engine



Maximum Speed: 110 km/h





The platform is able to attain combat tasks any time of the day, both day and night, while moving along the roads with a smooth riding surface (highways), along the natural soil roads, as well off-road, move across water obstacles wading and floating.



BMP-1M

ARMORED INFANTRY COMBAT VEHICLE

BMP-1 Armored Infantry Combat Vehicle with 'KBA-105TB 'Shkval-A' Remote Weapon Station (RWS)

Enhanced fire power RWS is designed to defeat ground and low-flying targets. RWS is controlled by special fire control system and stabilizer.



Dimensions: 6735x2940x2450



Crew: 3+8



Weight: 13,2 t +2%



Engine: UTD-20



Maximum Speed: 65 km/h



Armament:

Automatic gun	ZTM-1
Caliber	30 mm
Machine gun	PKT
Caliber	7,62 mm
Antitank guided missile system	Complex 212
Missile type	RK-2S
Automatic grenade launcher	AG-17
Caliber	30 mm

BMP-55

ARMORED INFANTRY COMBAT VEHICLE

BMP-55 is designed and produced on the basis of T-55. From the existent samples BMP-55 differs by antiprojectile armor and forward location of engine transmission compartment, that significantly enhances the protection of crew. The particular difference of the vehicle is the location

of troop's ramp in the stern that allows inserting the force under the shelter of armored vehicle hull. Engine and transmission are installed in one block adapted to quick

replacement.



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Machine gun	NSVT
Caliber	12,7 mm

Dimensions: 6200x3210x1950 Crew: 3+8

Weight: 28,5 t

Engine: 5TDF

Maximum Speed: 60 km/h







BMP-64

ARMORED INFANTRY COMBAT VEHICLE

BMP-64 is designed and produced on the basis of T-64 Tank, has cannonproof armor and forward located engine transmission compartment, the bottom of which contains additional anti-mine protection. Vehicle can be subsumed into the MRAP category (Mine Resistant Ambush Protected), so as such with the enhanced sustaining power to countermining and protection from ambushing. The distance fire control, TV sight with self-sufficient stabilizer, cameras of wide and narrow range of vision, thermal camera, and laser rangefinder are also provided. Driver is equipped with TV surveillance scope.



Dimensions:

6500x3300x1950



Grew: 3+12



Weight: 34,5 t



Engine: 5 TDF



Maximum Speed: 60 km/h



Al Illulione	
Launchers	2 AAC, 1 ATMS
Gun	2A42
Caliber	30 mm
Machine gun	PKT
Caliber	7,62 mm

BMP-K-64



WHEELED ARMORED INFANTRY FIGHTING VEHICLE

BMP-K-64 is designed and produced with the application of units and aggregates of T-64 Tank. From the existent samples of wheeled APC/IFV differs by anti-shell armor and forward location of engine transmission compartment that significantly enhances vehicle's protection.

An	mo	n n	mai	rect	ion

Front armor	270 mm
Board armor	82+20 mm
Rear plating	40 mm
Bilge armor	mine protection
Doors for landing troops	Rear door location



Dimensions:

5ŤDF Maximum Speed:





BMT-72

HEAVY INFANTRY COMBAT VEHICLE

The Heavy Infantry Combat Vehicles are intended to carry out tactical operations either as integral part of tank combat formations in close co-operation with battle tanks or to operate

on their own.



Dimensions: 10760x3770x2285



3+5



Weight: 60 t



Engine: 5TDF



Maximum Speed: 60 km/h



Armament:

Gun	125 mm
Coaxial machine gun	7,62 mm
Anti-aircraft machine gun	12,7 mm



all types of military operations under various weather and climatic

ARMORED REPAIR

conditions.



Weight:



46 t Engine: 1200 h/p



Maximum Speed: 40 km/h



Main Specifications:

Lifting capacity	25 t
Winch tractive power	25 t
Bulldozing kit effectiveness	150 m³/h
6TD-2 engine power output	882 (1200) kW (hp)



ADJUSTMENT OF BTR-4E

ARMORED PERSONNEL CARRIER

BTR-4E Armored Personnel Carrier is intended to transport personnel of mechanized infantry units and to provide fire support in combat.



7878x2965x3050



Crew:



Weight: 21,9 t



Engine: 2-cycle diesel engine ZTD



Maximum Speed: 110 km/h



Main Specifications:

Maximum road speed	110 km/h
Maximum speed afloat	8-10 km/h
Fuel consumption on the highway	80 l/100 km
Fuel consumption on the roads	150 l/100 km
Maximum gradient	30⁰
The maximum angle	25°
Maximum cruising range on the highway	690 km

PTS-M (PTS-2)

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 to3 points.



Unit loading:

On surface	20 t
On the water	12 t



Engine: B-46-5

Maximum Speed: on surface 60 km/h on the water 11,7 km/h





BTS-5B

UNIVERSAL MULTI-PURPOSE TRACTOR

Designed to conduct mechanical reconnaissance on the battlefield, work on the emergency evacuation of tanks from the enemy war zone, pulling tanks that stuck or sank, carrying lifting, digging, welding works and technical provision of armored units in the field.



Dimensions: 7890x3460x2687



Crew



Weight:



Engine: V-84



Maximum Speed: 60 km/h



_							
а	119	m	10	m	•	mi	ю
м		ш	м	ш	п	ш	

Machine gun	NSV
Caliber	12,7 mm

Special equipment:

Tractive winch

Auxiliary winch

Bulldozer equipment

Crane unit

Electric welding equipment

Loading platform





COMBAT ENGINEER VEHICLE

Combat Engineer Vehicle IMR-2 is designed to create passageways, clearing blockages and destructions during engineer support of combat troops, for rescue operations in zones of mass destruction, support for lifting operations.

Operational efficiency:

opor acional officionogr	
while creating passages:	
∎in felled trees	340-450 m/h
■in stone road-blocs	300-350 m/h
when laying convoy paths	6-10 km/h
when moving soil	230-300 m/h





BMR-2

ARMORED DEMINING VEHICLE

Special tracked Armored Demining Vehicle BMR-2 is designed for demining roads, creation of passages in minefields.



Dimensions: 9650x3850



Crew



Weight



Armament:	
Machine gun	NSV
Caliber	12,7 mm
Crane arm:	
type	dismountable with manual transmission RUL-1,5
carrying capacity	3000 kg
Mounted equipment:	
Mine trawl	KMT-7

MTU-20



Main Specifications:

Time to set one bridge span	5 min
Width of barriers	18 m
Load-carrying capacity of the bridge	to 50 t

MECHANIZED BRIDGE

Mechanized Bridge MTU-20 is designed to create passages up to 18 meters and make passways for tanks and other military vehicles weighing 50 tons, across rivers, ditches, cliffs.

	11640X3300X3400
2	Crew: 2
	Weight: 32 t
	Engine: 5TDF
	Maximum Speed: 50 km/h

Dimensions:

OTHER WHEELED AND TRACKED VEHICLES



TRM-1U

TANK REPAIR WORKSHOP

Tank Repair Workshop TRM-1U is designed for technical support of tank divisions and units, repair and mounting, welding, locksmithing and mechanical works, and also to recharge the batteries in military repairing T-55, T-64, T-72, T-80, BMP-1 in the field conditions.

Undercarriage: automobile 3IΠ-131 with a winch and power take. Body: full-metal KM-157.





Workshop equipment allows to perform:

Replacement of components and assemblies to motor unit (engine, mounted components, radiators and other) using a crane arrow KC-1,5

Manual arc welding of ferrous metals and aluminum welding

To perform locksmithing-mehanical works

Recharging rechargeable batteries

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:

- armored medical transporter for search and rescue of wounded;
- armored first aid medical clinic.

Special equipment:

■air conditioner

∎heater

■bandaging table

■inhaler with spare air cylinders

■water tank

■medical stretchers

■washstand

■complete set of immobilizing splints

■lock box

Dimensions: 6755x3160x3600



Places to transport wounded: At the stretchers - 4, sitting - 8



Weight: 14 t









HULK

MULTI-PURPOSE ARMORED HIGH-END CAR



Seating capacity: 2+10



Full weight: 16000 kg



Engine type: diesel, turbocharged



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

Main Specifications:

Configuration	4x4
Truck full weight, kg	16000
Truck curb weight, kg	14000
Fuel tank, I	2x165
Engine: diesel, turbocharged	
Power, h.p.	310
Tires	445/65R22.5
Seating capacity	2+10
Ballistic protection	STANAG 4569 Level 2
Mine protection	STANAG 4569 Level 2a, 2b





BOGDAN KM450

GENERAL PURPOSE CAR







Maximum Speed: 104 km/h



Full weight: 5650 kg



Main Specifications

Main Specifications:	
Engine type	3.9 Hyundai D4D, diesel
Engine Capacity, I	3.907
Drive configuration	4x4, part time
Transmission	5 MT, manual, fully synchronized T036E
Horsepower,	139
Full weight, kg	5650
Max speed, km/h	104
Length/width/height, mm	5460/2180/2450
Wheel base, mm	3218
Payload, kg	2500
Gradient, degrees	60
Max range, km	700
Fuel tank, I	106

A specially designed chassis for military use can be used to create a general purpose car (an on-board light truck with awning), and as a base for a variety of special army cars: an artillery fire control vehicle, a sanitary vehicle, a communication vehicle, a laboratory on wheels, a light salvo fire system or antitank complexes, mobile residential module and so on. It may also serve as a base for a lightweight armored special purpose vehicle.





MULTIPLE ROCKET LAUNCHER SYSTEM ON Kraz-Chassis



Maximum Speed: 100 km/h



Full weight: 20 400 kg

Combat Vehicle BM-21U is designed for: - the annihilation of unprotected and shelter-based

enemy personnel and machinery;
- the destruction of carried armed vehicles, tanks and other combat machinery in areas of

dislocation; - the destruction of artillery and mortar batteries, tactical rocket(missile) batteries, as well as helicopters at the

landing sites;

- the destruction of command units, fuel and ammunition storages, as well as for other targets.



Туре	Six-wheels, with all-leading bridges on the KrAZ-6322-010 vehicle base
Layout design	Front-engine, all-wheel drive
Wheel formula	6x6
Crew	5 persons
The main way of operating	From the cabin
Cabin	5 seats, 2-rowed
Loaded weight	20,4 t
Power-weight ratio	11.91 kW / t (16.17 hp / t)
Dimensions: length: width: out of battery	9070 mm 2700 mm
in battery height: out of battery in battery at the angle of ascensions 55 deg. while transporting track width clearance	3186 mm 3460 mm 4705 mm 3130 mm 2160 mm 370 mm



Main Specifications:

Maximum speed on chassis	100 km/h
Minimal turning radius: - by the outer wheel - by the outer point of the front bumper	Not more than 13,0 m 13,5 m
Fuel tanks volume	2×250 l
Control fuel consumption per 100 km of the path while driving at a constant speed of 60 km / h, l, not more than	33,4
operational range	1300 km
Braking path at the speed of 30 km/h	Not more than 11.24 m
Passable obstacles: - Maximal ascension angle - Maximal angle of side-long slope - Ditch - Wall - maximal depth of a passable hard-bottom fording point considering the natural churning of water while at the nominal pressure in tires	30 degrees 25 degrees 2.0 m 0.5 m 1,5 m





THE KRAZ-MPV SHREK ONE

The KrAZ-MPV Shrek One is multirole offroad mine protected vehicle with V-hull used to carry Special Forces personnel, cargoes and equipment.

SPECIFICATIONS

Chassis cab:	KrAZ-5233HE
Configuration	4x4
Truck curb weight, kg	16000
Gearbox:	manual, automatic
Fuel tank, I	2x250
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Tires:	525/70R21 16.00R20; 1300x530-533 (CTIS)
Seating capacity:	2 crewmembers + 13 seats



Security level

- Ballistic protection: B6+/STANAG 4569 Level 2
- Mine protection: under any wheels - 2 x TM57 mines (14 kg TNT), directly under hull - 1 x TM 57 mine (7 kg TNT)

KRAZ-MPV SHREK ONE RCV



Security level

- Ballistic protection: B6+/STANAG 4569 Level 2
- Mine protection: under any wheels - 2 x TM57 mines (14 kg TNT) directly under hull - 1 x TM 57 mine (7 kg TNT)

The KrAZ-MPV (Mine Protected Vehicle) Shrek One RCV is used for investigation in dangerous areas and removal of explosive devices

SPECIFICATIONS

Chassis cab:	KrAZ-5233HE
Configuration	4x4
Truck curb weight, kg	16000
Engine Type:	YAMZ, Ford, Deutz
Power, h.p.	330
Tyres (CTIS)	445.65R22.5 16.00R20
Boom reach, m	9
Slew angle, deg	325
Lifting capacity, kg	250





KRAZ-MPV FIONA

The KrAZ-MPV Fiona is multirole armored offroad mine protected vehicle with V-hull based on KrAZ-6322. Intended for operations on transportation Special Forces personnel, cargoes and equip- ment.

SPECIFICATIONS

Chassis cab:	KrAZ-6322
Configuration	6x6
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Gearbox:	manual,, automatic
Fuel tank, I	2x250
Tires:	1300x530-533 445/65R22,5 (CTIS)
Seating capacity:	2 crewmembers + 13 seats



Security level

- Ballistic protection: B6+/STANAG 4569 Level 2
- Mine protection: under any wheels - 2 x TM57 mines (14 kg TNT) directly under hull - 1 x TM 57 mine (7 kg TNT)

KRAZ HURRICANE



Security level

■ Protection: STANAG 4569 Level 4

KrAZ Hurricane multirole armored vehicle is designed for various combat missions.

SPECIFICATIONS

Chassis cab:	KrAZ-7634HE
Configuration	8x8
Truck curb weight, kg	24000
Load carrying capacity, kg	17000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	350450
Gearbox:	automatic, 6-speed
Fuel tank, I	2x250
Seating capacity:	2 crewmembers + 13 seats



KRAZ-6322 RAPTOR

The KrAZ-6322 Raptor is a heavy multipurpose armored vehicle. Designed for prompt transportation of personnel of military units and various equipment, towing of trailers and artillery systems in the most hostile environmental conditions of all the continents.

SPECIFICATIONS

Configuration	6 x 6
Truck curb weight, kg	21000
Load carrying capacity, kg	4200
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Maximum gradient, deg	35
Maximum side slope, deg	25
Max speed, km/h	90
Seating capacity:	2 crewmembers + 24 seats



Security level

■ Protection: CEN level BR6



KBAZ-6322 SOLDIER

The KrAZ-6322 Soldier high mobility tactical vehicle are intended for transportation of personnel of military units and various cargos. It can be used as a ballast prime mover for a rcrafts transpor- tation on airfields.

SPECIFICATIONS

Configuration	6x6
Truck curb weight, kg	12900
Load carrying capacity, kg	12000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	100
Tyre:	525/70R21 16.00R20; 1300x530-533
Max. gradient, %	60
Maximum side slope, deg	25



KRAZ-6322 PA BASTION

Combat MLRS systems as part of the vehicle chassis KrAZ-6322 and artillery - multiple rocket launcher BM-21 «Grad» or 9K57 «Hurricane». SPECIFICATIONS

SPECIFICATIONS

Configuration	6x6
Truck gross weight, kg	18400 - 21600
Turbocharged engine	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	85





The KrAZ-63221 Bridge vehicle is a transportation unit of PMP heavy folding pontoon bridge and TMM treadway bridge of engineering troops.

SPECIFICATIONS

Configuration	6x6
Truck gross weight, kg	12900
Load carrying capacity, kg	12000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	85



KRAZ-6322 RADIST

The KrAZ-6322(1) REB is intended for installation of various communications systems that enable the organization of communication in the field.

Configuration	6x6
Truck curb weight, kg	11200
Load carrying capacity, kg	13600
Turbocharged engine	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	85
Fuel consumption, I/100km	35





KRAZ-6322 MOBILE WORKSHOP TRUCK

The KrAZ-6322 mobile workshop truck provided with recovery equipment is used for in-field maintenance and repair of motor and other vehicles.

SPECIAL EQUIPMENT

Hiab, Fassi
12,2
8,4
12
9000
8
3

Special tools and equipment for assembly-disassembly, mechanical and welding works



SPECIFICATIONS

Configuration	6x6
Load carrying capacity, kg	6 000
Turbocharged engine YAMZ, Ford, Deutz, Power, h.p.	300400
Top speed, km/h	85
Maximum gradient, deg.	32
Top speed, km/h	85
Control fuel consumption, I/100 km	35

KRAZ-6322

The KrAZ-6322 chassis provided with reinforced rear suspension is designed to be fitted with special body equipment for use on all kinds of roads and off-road.



Configuration	6 x 6
Truck curb weight, kg	10900 - 11600
Load carrying capacity, kg	11400 - 20600
Turbocharged engine	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	100
Tyre	525/70R21; 530/70-21; 445/65R22,5; 16.00R20; 1300x530-533
Max. gradient, %	60
Maximum side slope, deg	25





KRAZ-5233BE SPETSNAZ

The KrAZ-5233BE Spetsnaz high mobility tactical vehicle (HMTV) are intended for prompt transportation of personnel of military units, as well as various equipment in the most hostile environmental conditions of all continents.

SPECIFICATIONS

Configuration	4x4
Truck curb weight, kg	11000
Load carrying capacity, kg	6000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	120
Tyre	525/70R21 16.00R20
Max. gradient, %	58
Maximum side slope, deg	25



KRAZ-5233HE

The KrAZ-5233HE chassis is designed to be fitted with industrial body equipment for use in emergency responce, fire suppression and other man-made and natural disaster relief operations, as well as for carrying personell and life-support equipment across rough terrain.



Configuration	4x4
Truck curb weight, kg	10100
Load carrying capacity, kg	7000
Turbocharged engine	YAMZ, Ford, Deutz
Power, h.p.	300400
Top speed, km/h	120
Tyres	525/70R21; 16.00R20; 530/70-21
Max. gradient, %	58
Maximum side slope, deg	25
Max. gradient, %	58



KRAZ-6446

The KrAZ-6446 all-wheel drive fifth-wheel tractor is intended for the transportation of heavy cargoes and combat vehicles including tanks on all types of roads and off the road. The tractor is used in tractor/semitrailer combination, semitrailer gross weight up to 70 ton.

SPECIFICATIONS

Configuration	6x6
Truck curb weight, kg	11000
Truck gross weight, kg	28000
Towed semitrailer weight, kg	70000
Fifth-wheel vertical load, kg	17000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	400
Tyre:	525/70R21 16.00R20; 445/65R22,5
Top speed, km/h	70
Max. gradient of road train, %	90



KRAZ-63221 WAGON TRUCKS



All-terrain buses based on KrAZ-63221, KrAZ-5233H2 and KrAZ-5233HE chassis are used for carrying military personnel.

Chassis cab	5233H2	5233HE	63221
Configuration	4x2	4x4	6x6
Turbocharged engine:	YAN	MZ, Ford, De	eutz
Power, h.p.	300400		
Seating capacity	22+2	22+2	26+2
Fuel tank, I	250	350	2x250
Top speed, km/h	90	90	90





KRAZ B12.2MEX

The KrAZ B12.2MEX cab-over-engine off road platform truck is used for carrying personnel and various cargoes and towing trailers over all kinds of roads and terrains.

SPECIFICATIONS

Configuration	6x6
Truck gross weight, kg	25000
Load carrying capacity, kg	12000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	300400
Gearbox:	manual, automatic
Fuel tank, I	2x250
Tires:	16.00R20 45/65R22,5; 1300x530-533
Top speed, km/h	100
Maximum gradient, %	58
Turning radius, m	11,5



KRAZ-7634HE



The KrAZ-7634HE special shassis is used to be up fitted with various military equipment and it's operation over all kinds of roads and terrains.

Configuration	8x8
Truck gross weight, kg	41000
Load carrying capacity, kg	27000
Turbocharged engine:	YAMZ, Ford, Deutz
Power, h.p.	400500
Fuel tank, I	2x350
Tires	445/65R22,5 16.00R20
Maximum gradient, %	25
Turning radius, m	14,0

ARMAMENT SYSTEMS



BM.5 'KATRAN-C' REMOTE WEAPON STATION (RWS)

Enhanced fire power RWS is designed to be mounted on BMP-1 and Armored Personnel Carriers, and to defeat ground and low-flying targets. It is controlled by special centralized fire control system from turret.



Main Specifications:

Automatic gun	ZTM-1
caliber	30 mm
Machine gun	PKT
caliber	7,62 mm
Antitank guided missile system	Complex 212
missile type	RK-2S
Automatic grenade launcher	AG-17
caliber	30 mm



REMOTE WEAPON SYSTEM KBA-105TB 'SHKVAL-A'

Armament:

Automatic gun	ZTM-1
caliber	30 mm
Machine gun	PKT
caliber	7,62 mm
ATGM system	Complex 212
missile type	RK-2S
Automatic grenade launcher	AG-17
caliber	30 mm
Fire control system	Tandem-2
Weapon stabilizer	SVU-500-ZTs

Enhanced fire power RWS is mounted on BMP-1-type Armored Fighting Vehicles as well as BTR-type Armored Personnel Carriers, and is designed to defeat ground and low-flying targets. RWS is controlled by special fire control system and stabilizer.





BM-3M (SHTURM-M) COMBAT MODULE

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-craft's turret.

Main Specifications:

main opoundations.	
Automatic gun	ZTM-1
caliber	30 mm
Machine gun	KT-7,62 (PKT)
caliber	7,62 mm
Anti-tank missile system	«Barrier»
Automatic grenade launcher	KBA-117 (AG-117)
caliber	30 mm
Smoke-screening system	902B



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 (2A42)
caliber	30 mm
Machine gun	KT-7,62 (PKT)
caliber	7,62 mm
ATGM system	9P135M «Konkurs»
Grenade launcher	AG-17
Sighting system	PNK-4S aor PNK-5, PZU-7



Armament:

Gun	2 x 2A7M
caliber	23 mm
Machine gun	KT-7,62 (PKT)
caliber	7,62 mm
Smoke screen system	СП3

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.

height (from the race mechanism surface)

nism surface) 962 mm

width

1500 mm

1720 mm
Weight without ammunition

mmunition 860 kg

Weight with ammunition 985 kg



Combat crew



ARMAMENT SYSTEMS



PARUS

COMBAT MODULE

Intended to be installed at armored vehicles such as wheeled infantry armored vehicles and tracked infantry combat vehicles. The main tasks of the module are: manpower defeat, fighting the armored targets and gun posts, low-flying and low-speed air targets.



Armament:

A manona	
Automatic gun	ZTM-1
Caliber	30 mm
ATMS	«barrier»
Ammunition	2 rocket
Grenade launcher	KBA-117(AG-117)
Caliber	30 mm
Machine gun	KT-7,62 (PKT)
Caliber	7,62 mm
Smoke grenade launcher	902B

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
Caliber	30 mm
Machine gun	KT-7,62 (PKT)
Caliber	7,62 mm
Armament stabilizer	SVU-500-10R
Fire control system	«Astra»



3TD-1

DIESEL ENGINE

Serves as a powerplant at modernization of wheeled armored vehicles: BTR-70, BTR-80, BREM on the base of BTR-70.



Dimensions: 1231x955x581



Rated power: 280 h.p.

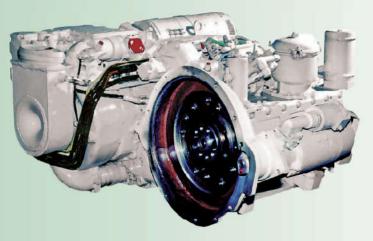


Weight: 850 kg



Main Specifications:

-	
Bore	120 mm
Stroke	2x120 mm
Number of cylinders	3
Nominal volume	8,15 l
Specific fuel consumption	158 g/e.h.p.h
Rotation frequency	2600 min ⁻¹



3TD-2

DIESEL ENGINE

Serves as a powerplant at modernization of tracked: BTR-50, PT-76, OT - 62 «Topaz», BMP-1, BMP -2 and wheeled armored vehicles.

Main Specifications:

T	
Bore	120 mm
Stroke	2x120 mm
Number of cylinders	3
Nominal volume	8,15
Specific fuel consumption	160 g/e.h.p.h
Rotation frequency	2600 min ⁻¹



Weight: 850 kg



ENGINES, UNITS AND AGGREGATES



3TD-3A

DIESEL ENGINE

Serves as a powerplant at modernization of light class tracked and wheeled armored vehicles BTR-4.



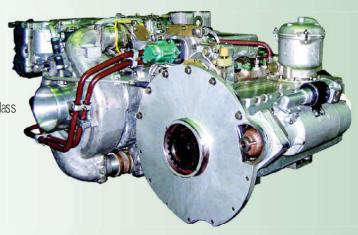
Dimensions: 1182x955x581



Rated power: 500 h.p.



Weight: 800 kg



Main Specifications:

-	
Bore	120 mm
Stroke	2x120 mm
Number of cylinders	3
Nominal volume	8,15 l
Specific fuel consumption	155 g/e.h.p.h
Rotation frequency	2600 min ⁻¹

EA10-2

POWER UNIT

The power unit serves as a source of electric power supply of a direct current for all the necessary works of T-72UA1 tank in parking mode with the basic diesel engine off. The power unit is mounted in the engine-transmission compartment. The cooling unit, starting control gear are installed in the armored

compartment on the shelf over the caterpillar



p	
Rated voltage	28,5 V
Fuel consumption	4,2 kg/h
Loss of oil on burn-out	0,09 kg



Weight: 250 kg









3TD-4

DIESEL ENGINE

Intended for use as a powerplant for modernization of BMP-3 and other armored vehicles.



Dimensions: 1182x955x581



Rated power: 600 h.p.

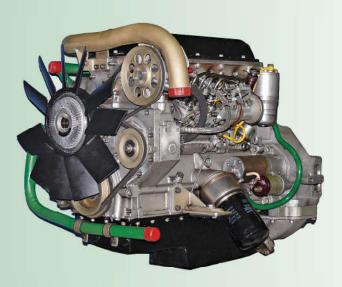


Weight: 800 kg



Main Specifications:

•	
Bore	120 mm
Stroke	2x120 mm
Number of cylinders	3
Nominal volume	8,15 l
Specific fuel consumption	160 g/e.h.p.h
Rotation frequency	2600 min ⁻¹



Main Specifications:

Rotation frequency	4200 min ⁻¹
Bore	88 mm
Stroke	82 mm
Operating volume	2,0
Fuel specific consumption	16,2 g/kW-h

4DTNA1

DIESEL ENGINE

Designed for use as a powerplant for UAZ, Gazel, Sobol automobiles.





EA10-1

POWER UNIT

The power unit serves as a source of electric power supply of a direct current for all the necessary works of military tracked vehicles in parking mode with the basic diesel engine off.



Dimensions: 1300x495x315



Rated power: 10 kw



Weight: 250 kg



Main Specifications:

-	
Rated voltage	28,5 V
Fuel consumption	4,2 kg/h
Loss of oil on burn-out	0,09 kg



EA10MSB

POWER UNIT

The power unit serves as a source of electric power supply of a direct current for all the necessary works of military tracked vehicles in parking mode with the basic diesel engine off.

Provides basic diesel engine start.

The power unit is mounted in the armored compartment.

Dimensions: 1450x550x390



Rated power: 10 kw







Main Specifications:

Rated voltage	28,5 V
Fuel consumption	4,2 kg/h
Loss of oil on burn-out	0,09 kg



5TDFMA-1

DIESEL ENGINE

Intended for modernization of T-72 tank without change of engine — transmission compartment volume, has the built-in tank fan drive.



Dimensions: 1413x955x581



Rated power: 1050 h.p.



Weight: 1080 kg



Main Specifications:

Rotation frequency	2850 min ⁻¹
Number of cylinders	5
Bore	120 mm
Stroke	2x120 mm
Adaptation factor	1,2
Operating volume	13,6 l
Fuel specific consumption	165 g/e.h.ph



5TDFMA

DIESEL ENGINE

Intended for modernization of T-55, T-62, T-64 tanks.

Main Specifications:

2850 min ⁻¹
5
120 mm
2x120 mm
1,2
13,6 I
165 g/e.h.ph



Weight: 1080 kg



ENGINES, UNITS AND AGGREGATES



5TDFM

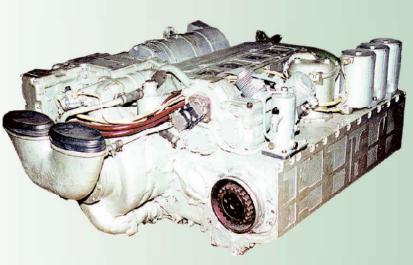
DIESEL ENGINE

Designed for use as a powerplant for tanks BM Bulat and T-55AGM. Can be used in modernization of T-54, T-55, T-59, T-62, T-64B tanks.









Main Specifications:

Rotation frequency	2800 min ⁻¹
Fuel specific consumption	167 g/e.h.ph
Bore	120 mm
Stroke	2x120 mm
Operating volume	13,6 I



5TDF

DIESEL ENGINE

Designed for use as a powerplant of the T-64 tank.

Main Specifications:

main opositionationol	
Rotation frequency	2800 min ⁻¹
Fuel specific consumption	178 g/e.h.ph
Bore	120 mm
Stroke	2x120 mm
Operating volume	13,6





Weight: 1040 kg





AD8-P28,5-2RP

POWERPLANT UNIT

Designed for power supply of the on-board complex «Polozhenie - 2».



Dimensions: 1360x620x1000



Rated power: 8 kw



Weight: 500 kg



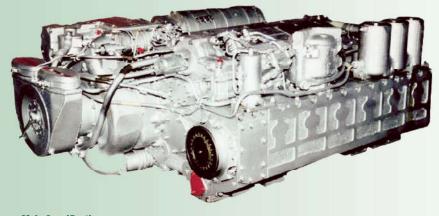
Main Specifications:

Rated voltage	28,5 V
Current	direct
Rotation frequency	3000 min ⁻¹
Fuel consumption	3,4 g/e.h.ph

6TD-2E

DIESEL ENGINE

Designed for use as a powerplant of the Oplot main battle tank. BM «Oplot». Equipped with additional elements of KSUD tank automatic control system.



Main Specifications:

The state of the s	
Bore	120 mm
Stroke	2x120 mm
Number of cylinders	6
Operating volume	16,3 l
Fuel specific consumption	160 g/e.h.ph (g/kW-h)
Rotation frequency	2600 min ⁻¹



1200 h.p.



Weight: 1180 kg





6TD-1

DIESEL ENGINE

Designed for use as a powerplant of the T-80UD tank. Can be used for upgrade of the T-72 tank.



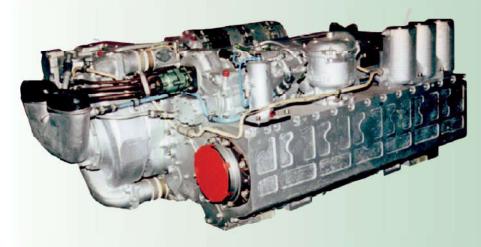
Dimensions: 1602x955x581



Rated power: 1000 h.p.



Weight: 1180 kg



Main Specifications:

Rotation frequency	2800 min ⁻¹
Adaptation factor	1,15
Fuel specific consumption	158 g/e.h.ph (g/kW-h)



Main Specifications:

main opeomoutioner	
Rotation frequency	2800 min ⁻¹
Fuel specific consumption	158 g/e.h.ph (g/kW-h)
Bore	120 mm
Stroke	2x120 mm
Operating volume	16,3

6TD-1R

DIESEL ENGINE

Designed for use as a powerplant for armored recovery and repair vehicles BREM-84, and also for modernization of BREM on the basis of T-72 tanks. Equipped with a transmission for additional BREM operating elements.

Dimensions: 1602x1093x581



735 (1000) Rated power: (h.p.)



Weight: 1210 kg





BTR-3E1: T2027 TU INTEGRATED CREW TRAINING SIMULATOR

Use of the simulator during APC's crew training.



Main Specifications:

Ambient operating temperature	+5+35 °C
Temperature during transportation	-25+40 °C
Relative humidity at 25 °C, without condensing	no more 80%
Endurance	no more 4 h
Time of interval	no less 1 h
Readiness time	no more 30 min
Operation guaranty period 1 year	
Voltage, AC	
Alternating current network	380/50, 220/50 V/Hz
Average (peek) power AC	no more 6 (12) kW
Weight	no more 2200 kg

WITH "PARUS": T2033 TU INTEGRATED BTR-4 CREW TRAINING SIMULATOR

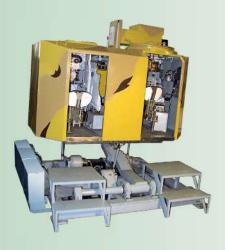
Use of the simulator during APC's crew training.

Main Specifications:

Ambient operating temperature	+5 +35 °C			
Temperature during transportation	-25 +40 °C			
Relative humidity at 25 °C, without condensing	Not more 80%			
Endurance	Not more 4 h			
Time of interval	Not less 1 h			
Readiness time	Not more 30 min			
Operation guaranty period 1 year				
Voltage, AC	380/50, 220/50 V/Hz			
Average (peek) power AC	12 (24) KW			
Weight	3100 kg			



INTEGRATED DYNAMIC TRAINING SIMULATOR FOR ARMORED COMBAT



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;
- working out firing skills;
- working out the crew interaction skills in close to real conditions.

The components of the comprehensive simulator of the armored vehicles can be used as separate simulators of workstations by remote control.

SIMULATORS



T2010 INTEGRATED DYNAMIC TRAINING SIMULATOR FOR BMP-2 INFANTRY COMBAT VEHICLE CREW

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.





INTEGRATED DYNAMIC T80UD TANK DTE

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:
- 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.

INTEGRATED DYNAMIC T-64B; TE-64 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: 7

•		
Total weight		4 t
Consumed power		12 kW
Time of readiness		5 min
Endurance		10 h
Drive charge		700-900 kgs
Seats		3 men.
Instructor seat		1 men.
Weight of the cabir	1	1,5 t





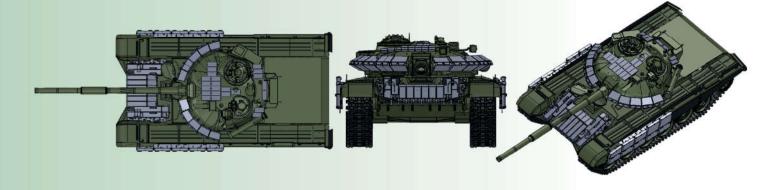
«HKChPWSH» DYNAMIC PROTECTION ELEMENT

Firing conditions (in areas where ERA elements are installed): for antitank grenades — front side $0\pm90^\circ$ from longitudinal axis of a tank for HEAT projectiles and ATGMs — front side $0\pm35^\circ$ from longitudinal axis of a tank for AP projectiles — front side $0\pm35^\circ$ from longitudinal axis of a tank to hull glacis plate and turret, $0\pm20^\circ$ to the front part of a hull side For EFP — $0\pm20^\circ$ to the front part of a hull side

	NOZH type (with HKChPWSH elements)	DUPLET type (with HKChPWSH elements)
Antitank grenade launchers		
PG-7V, PG-7VM, PG-7VS, PG-9V, PG-9VS armour piercing of 260-400 mm RHA plate	up to 90%	up to 95%
PG-7VL armour piercing of 450-550 mm RHA plate	up to 70%	up to 80%
PG-7VR (tandem warhead) armour piercing of 650 mm + ERA	up to 30%	up to 70%
Shape charged (HEAT) projectiles		
BK-14M armour piercing of 450 mm RHA plate	up to 80%	up to 90%
BK-18M armour piercing of 550 mm RHA plate	up to 70%	up to 80%
ATGM		
TOW-1 armour piercing of 630 mm RHA plate	up to 70%	up to 80%
TOW-2 (tandem warhead) armour piercing of 900 mm RHA plate + ERA	-	up to 60%
Kornet-E (tandem warhead) armour piercing of 1300 mm RHA plate + ERA	-	up to 50%
EFP (Explosively Formed Penetrator)		
TM-83 armour piercing of 100 mm	up to 40%	up to 80%
Armour-piercing projectiles		
BM-15, BM-22, BM-26 armour piercing of 160-210 mm RHA 60° 2km distance	up to 80%	up to 90%
DM-23, M111, BM-29 armour piercing of 180-200 mm RHA 60° 2km distance	up to 40%	up to 60%
BM32, BM42 (Mango), DM-33, M829 armour piercing of 260-300 mm RHA 60° 2km distance	up to 50%	up to 60%









« 4C2OU, 4C22U» DYNAMIC PROTECTION ELEMENTS

Firing conditions (in areas where ERA elements are installed): for antitank grenades — front side $0\pm90^\circ$ from longitudinal axis of a tank for HEAT projectiles and ATGMs — front side $0\pm35^\circ$ from longitudinal axis of a tank for AP projectiles — front side $0\pm35^\circ$ from longitudinal axis of a tank to hull glacis plate and turret, $0\pm20^\circ$ to the front part of a hull side

	4C20U (Kontakt-1)	4C22U (Kontakt-5)
Antitank grenade launchers		
PG-7V, PG-7VM, PG-7VS, PG-9V, PG-9VS armour piercing of 260-400 mm RHA plate	up to 90%	up to 90%
PG-7VL armour piercing of 450-550 mm RHA plate	up to 50%	up to 50%
PG-7VR (tandem warhead) armour piercing of 650 mm RHA plate + ERA	-	-
Shape charged (HEAT) projectiles		
BK-14M armour piercing of 450 mm RHA plate	up to 80%	up to 80%
BK-18M armour piercing of 550 mm RHA plate	up to 70%	up to 70%
ATGM		
TOW-1 armour piercing of 630 mm RHA plate	up to 60%	up to 60%
TOW-2 (tandem warhead) armour piercing of 900 mm RHA plate + ERA	-	-
Kornet-E (tandem warhead) armour piercing of 1300 mm RHA plate + ERA	-	-
Armour-piercing projectiles		
BM-15, BM-22, BM-26 160-210 mm RHA 60° 2km Short rod	-	up to 60%
DM-23, M111, BM-29 180-200 mm RHA 60° 2km Long rod	-	up to 30%
BM32, BM42 (Mango), DM-33, M829 260-300 mm RHA 60° 2km	-	up to 20%



