

UNEX

**Unmanned multi-purpose robotic
all-terrain platform for the most
demanding off-road tasks**



UNEX

Unmanned all-terrain amphibious vehicle



UNEX UGV is a brand of unmanned multi-purpose all-terrain platforms that have no analogues in the world for their technical capabilities and characteristics.

The uniqueness of UNEX UGV solutions is explained by a special design that ensures off-road driving on land and movement on water, regardless of the depth of the reservoir. The modularity and multifunctionality of the platform are designed to operate in the most extreme climatic conditions and in aggressive dual-use scenarios.

UNEX UGV is a joint Czech-Ukrainian product, with production localized in Europe. Field trials of the vehicle were carried out by specialized military units of Ukraine in the real defense operations.

The versatility of the platform makes it an ideal choice for a wide range of applications: from combat missions, reconnaissance, search and rescue, patrolling, and security, to various civil operations.

USAGE SCENARIOS

- Military missions
- Infantry fire support
- Support and launch of UAVs
- Search and rescue operations
- Evacuation from combat zones
- Cargo transportation
- Demining
- Fire protection
- Border security

A control radius of 10 km ensures effective multipurpose use of the all-terrain amphibious platform across a broad range of tasks.

UNEX UGV FEATURES

PROTECTED NAVIGATION AND REMOTE CONTROL SYSTEM

- Resilience to electronic warfare systems
- Secure radio control system with automatic frequency shifting
- Built-in encryption for radio and video communication channels
- Signal retransmission
- User-friendly control panel
- Programmable autopilot with the ability to perform programmed missions, as well as a Follow Me function

HIGH PASSABILITY, MANEUVERABILITY, AND ENDURANCE

- Unique patented pneumatic circulating suspension ensures smooth and uniform movement of the unmanned platform
- Ultra-low-pressure tires allow it to traverse any type of terrain and obstacles

MODULARITY AND ULTIFUNCTIONALITY

- Unique off-road and amphibious capabilities allow it to perform tasks on any type of terrain.
- The ability to install specialized modules expands the application areas of a single vehicle, making it a versatile tool on the battlefield.

AVAILABLE MODULAR SOLUTIONS

- Transport and logistics configuration
- Evacuation module
- Combat module
- Demining module
- Electronic warfare module
- Air defence complex

MODULAR SOLUTIONS



Transport and logistics configuration



Combat module



Air defence complex



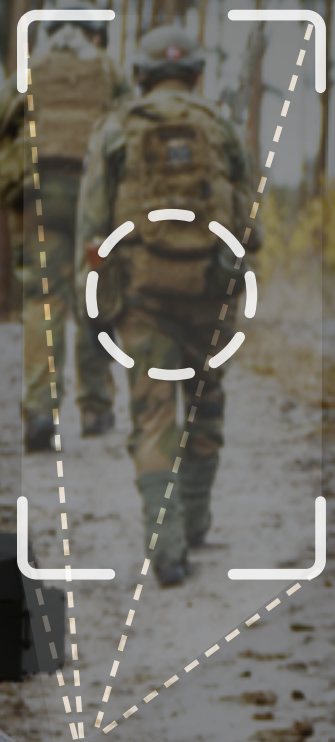
Evacuation module



Demining module

ADVANTAGES AND CAPABILITIES

- Can operate across all terrains, overcoming fallen trees, rocks, marshes and various bodies of water
- Capable of overcoming obstacles up to 1 meter high
- Can continuously swim in ponds, lakes, rivers, coastal waters, and frozen waters of any depth
- The only wheeled unmanned vehicle capable of moving from water onto ice
- Operates in temperature ranges from -30°C to +40°C in conditions of smoke, fog, rain, blizzards, hurricanes, heat, and storms
- The platform can be easily transported on public roads using a trailer.



Follow Me Function

TECHNICAL SPECIFICATIONS

Navigation and Control

Control Radius (via radio channel):	10 km
Control Radius (via LTE):	Unlimited with GSM signal availability
Satellite Navigation:	Interference-resistant CRPA
Thermal Camera:	1280x1024 matrix, 30Hz
Day Camera:	Sony 9500L, 40x optical zoom
Navigation Cameras:	Up to 5 additional navigation cameras for 360-degree viewing
Autopilot:	Programmable autopilot with the ability to execute programmed missions and a Follow Me function

Performance Characteristics

Drive Type:	Full, electric
Operating Temperature Range:	-30°C to +40°C
Gradeability Angle:	40°
Tilt Angle:	30°
Ground Clearance:	600 mm
Obstacle Height:	Up to 1 m

Dimensions

Length:	3810 mm
Width:	2500 mm
Height (on inflated wheels):	1900 mm
Payload Capacity:	Up to 1700 kg
Tire Inflation Time (0% to 100%):	~1 minute
Dry Weight:	2300 kg
Maximum Speed:	Up to 20 km/h
Tire Size:	1800x580x635 mm

Batteries

Battery Type:	Li-ion
Battery Power:	78 kW
Battery Weight:	340 kg
Battery Autonomy:	Up to 5 hours
Charging Time (0% to 100%):	Up to 6 hours

Engine

Electric motor power	2 pcs. 32.7 kW each
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Dump Module

Weight:	300 kg
Dimensions:	2879.5 x 1147 mm

Battle-Tested in Ukraine



info@ugvmachinery.com
info@ugvsolutions.com.ua