

IBIS

IBIS is a robot for pyrotechnic and combat missions. It is designed especially for operations in difficult and diverse terrain (including sand, rocks). High speed of the robot enables taking dynamic actions. Robot's manipulator provide big range of activities and applications. Precision drive system gives fluidity of the movement of every part of the robot, even during fast ride.



Unique features of IBIS robot

- High speed of the robot (10 km/h).
- Mobile platform with six-wheel drive.
- Each wheel is powered with independent drive.
- Front axis can move independently from robot's platform (up-down) with a possibility to block axis by operator.
- Wheel arms used in robot's suspension, provide very good grip even in difficult terrain.
- Huge lifting capacity of the robot's arm (15 kg – unfolded arm, 50 kg - folded arm).
- The range of manipulator with gripper is over 3 m.
- Possibility of robot remote control by fiber optic cable.
- Robot's control system enables independent and simultaneous steering of it's every drive.
- Auto diagnostic system detects all faults and projects text announcements on the LCD monitor.
- The robot is compatible with different additional equipment: pyrotechnical disrupters, automatic shotguns, chemical and radioactive contamination sensors, bus bar for remote detonation of explosives, barbed wire cutters, drills, recording devices and weaponry of every caliber.

Technical data:

No	Parameter	Value
1	Mass	350 kg
2	Width	890 mm
3	Length	1350 mm
4	Height	1100 mm (considering folded arms and antennas)
5	Maximum speed	10 km/h
6	Number of degrees of freedom	7
7	Manipulator base rotation range	400°
8	Lower arm rotation range	220°
9	Upper arm rotation range	220°
10	Telescopic arm linear motion	0,5 m
11	Wrist rotation range	220°
12	Gripper jaws rotation range	infinite
13	Gripper jaws opening range	0-360 mm
14	Manipulator's maximum lift	50 kg
15	Manipulator maximum reach	3150 mm
16	Operator's control panel weight	15 kg
17	Control system	radio/fibre optic cable
18	Maximum battery operation time	In excess of 4+ hours mission dependent
19	Maximum range (open area)	to 1000 meters