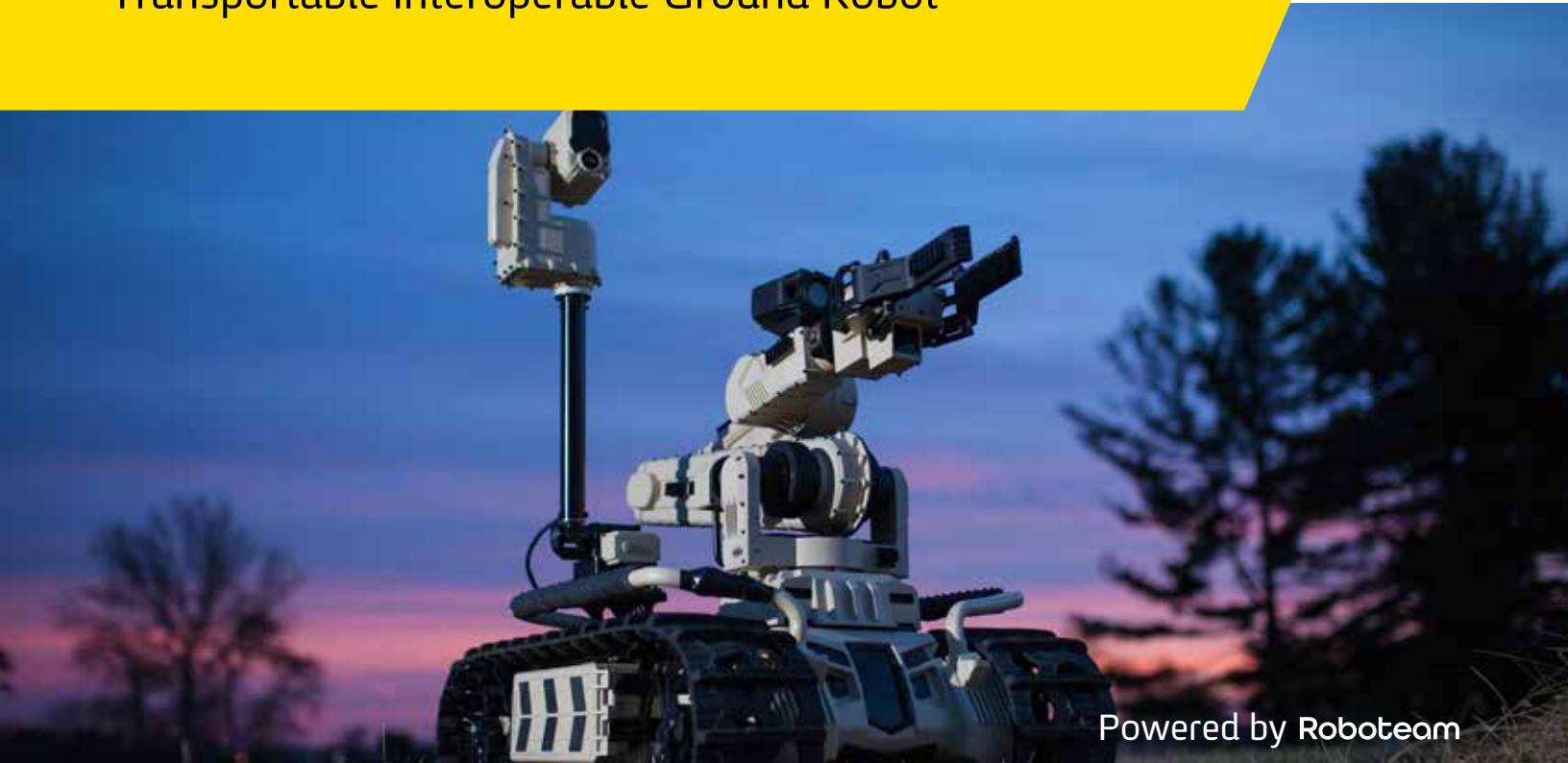


TIGR™

Transportable Interoperable Ground Robot



Powered by Roboteam

The Transportable Interoperable Ground Robot (TIGR) is a medium-sized, two-person portable unmanned ground vehicle (UGV). The highly mobile, all-weather system is capable of operation in any terrain.

TIGR incorporates best-in-class day and night vision modules that expedite IEDD search and CBRN survey operations. The 6-DOF manipulator allows the TIGR to effectively search/access a broad spectrum of environments, facilitating EOD Render Safe operations in critical situations. The modular design enables future integration of the most advanced manipulators, CBRN and EOD payloads. The TIGR's innovative design and integrated technology maximizes safe stand-off distances and expedites mission completion, while protecting soldiers and first responders.

Transportable Interoperable Ground Robot

System Highlights

Modular design allows for various add-ons, sensors and future technology integration. High maneuverability enables the system to overcome challenging environments, rough terrain and various obstacles.

Advanced vision module with six “best-in-class” HD video cameras, allows the operator to maintain complete situational awareness.

Tactical 6-DOF manipulator for high dexterity and complex EOD missions.



Main Applications

- CIED, IEOD
- Chemical Biological Radiological Nuclear (CBRN) detection
- Hazardous Material (HAZMAT) incident
- Subterranean and culvert inspection



Technical Specifications

Parameter	Description
System	
Dimensions (LxWxH)	35.9 x 23.2 x 13.9 in / 91.2 x 58.8 x 35.3 cm
Weight	176 lb / 80 kg including 6 batteries
Stair Climbing	40°, 10 in / 25.4 cm
Environmental	Ingress Protection 67
Operating Temp.	-25°F to 120°F / -31.6°C to 48.8°C
Vertical Obstacle	9.8 in / 25 cm
Range	3280ft / 1000m LOS
Operational time	6-8 hours (for 6 batteries) 8-10 hours (for 8 batteries)
Reliability Specifications	MIL-STD 209,461,464,810,882
Vision	HD cameras
Audio	Built in Microphone

Manipulator	
Total Weight	31 lb / 19 kg
6 Degrees of Freedom	Pan (360°) Shoulder (185°) Elbow 1 (275°) Elbow 2 (180°) Wrist (360°) GRIPPER
Vertical Reach	76.5 in / 1945 mm
Horizontal Reach	69.6 in / 1770 mm
Fully Collapsed	31.5 in / 800 mm
Fully Extended	60 in / 1500 mm
Front of Platform Pick up	42 lb / 19 kg
Full Extension Pick up	15 lb / 7 kg
IOP Ports	3 X IOP for user

Observation Head	
Main Cameras	Visible + thermal
Degrees of Freedom	PAN ±360° - Continuous, Tilt ±90°
Optical Zoom	X 30
Illumination	4 white and NIR LEDs high sensitivity sensor for low light and near total dark conditions
Human Recognition	Day: 1970ft / 600m Low: 1320ft / 400m Night: 985ft / 300m