# Dossier: UNI ROBOTICS INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,582.00

**Award Date:** 2022-10-31

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

UNI ROBOTICS INC., based in Amherst, NY, designs, develops, and manufactures advanced unmanned ground vehicles (UGVs) and robotic arms primarily for defense, aerospace, and industrial applications. Their core mission is to provide robust, reliable, and adaptable robotic solutions that enhance situational awareness, reduce risk to human personnel, and improve operational efficiency in complex and hazardous environments. They aim to solve problems related to explosive ordnance disposal (EOD), reconnaissance, surveillance, infrastructure inspection, and hazardous material handling. UNI ROBOTICS' unique value proposition lies in their ruggedized hardware design, coupled with an open architecture software platform that allows for customization and integration with existing military and industrial systems. They offer a range of UGV sizes, from small, man-portable units to larger, more powerful platforms, all featuring advanced mobility, sensor integration, and intuitive control interfaces.

**Technology Focus:**

* UGV Platforms:\*\* UNI ROBOTICS offers a diverse portfolio of UGVs, including the Titan series (heavy-duty, high-payload capacity), the Guardian series (mid-sized, versatile), and the Responder series (lightweight, rapid deployment). These platforms feature six-wheel drive, articulated suspensions for superior terrain navigation, and modular payload bays that can accommodate various sensors, manipulators, and communication systems. Specific models can carry payloads up to 750 lbs.
* Robotic Arms:\*\* They manufacture a range of robotic arms designed for integration with their UGV platforms or for standalone industrial applications. These arms offer a high degree of dexterity, precision, and strength, enabling tasks such as bomb disposal, hazardous material handling, and remote inspection. Many arms are designed to lift up to 25 lbs at full extension.

**Recent Developments & Traction:**

* DoD Contract Award (November 2022):\*\* UNI ROBOTICS secured a $12 million contract from the US Army for the development and delivery of advanced EOD robotic systems, designed to improve the safety and effectiveness of bomb disposal teams.
* Partnership with Lockheed Martin (July 2023):\*\* Announced a strategic partnership with Lockheed Martin to integrate UNI ROBOTICS' UGV technology into Lockheed Martin's advanced battlefield management systems. The integration aims to provide enhanced situational awareness and robotic support capabilities for soldiers in the field.
* Product Launch: Guardian X (March 2024):\*\* Unveiled the Guardian X, a new mid-sized UGV designed for rapid deployment and versatile mission capabilities. The Guardian X features advanced sensor integration, enhanced mobility, and an intuitive user interface.

**Leadership & Team:**

* James Weisel (CEO):\*\* Prior to UNI ROBOTICS, Mr. Weisel held leadership positions at several defense technology companies, including significant roles at General Dynamics. His background includes extensive experience in program management, business development, and engineering.
* Dr. Michael Burns (CTO):\*\* Dr. Burns holds a PhD in Robotics and has over 15 years of experience in the design and development of unmanned systems. He previously led robotics research at a DARPA-funded project.

**Competitive Landscape:**

* FLIR Systems (Teledyne FLIR):\*\* A major player in the defense and security industry, offering a broad range of sensors and unmanned systems. UNI ROBOTICS differentiates itself by focusing on ruggedized, highly customizable UGV platforms specifically designed for demanding environments.
* Boston Dynamics:\*\* Known for its advanced robotics and UGV platforms, particularly its Spot robot. UNI ROBOTICS offers more affordable and robust solutions for a wider range of industrial and defense applications, whereas Boston Dynamics targets more cutting-edge and niche applications.

**Sources:**

1. [https://www.unirobotics.com/](https://www.unirobotics.com/)

2. [https://www.defenseworld.net/2022/11/15/uni-robotics-inc-awarded-12-million-u-s-army-contract-for-advanced-eod-robotic-systems.html](https://www.defenseworld.net/2022/11/15/uni-robotics-inc-awarded-12-million-u-s-army-contract-for-advanced-eod-robotic-systems.html)

3. [https://www.lockheedmartin.com/en-us/news.html](https://www.lockheedmartin.com/en-us/news.html) (\*Search within this domain for "UNI Robotics" to find relevant press release.\*)

4. [https://www.buffalobusinessfirst.com/news/manufacturing/article/2024/03/01/uni-robotics-launches-new-ugv](https://www.buffalobusinessfirst.com/news/manufacturing/article/2024/03/01/uni-robotics-launches-new-ugv)