# Dossier: TDI NOVUS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,673.00

**Award Date:** 2023-07-25

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

TDI NOVUS INC. is a technology company focused on developing and deploying advanced sensing, imaging, and data analytics solutions for defense, security, and infrastructure applications. Their core mission is to provide actionable intelligence derived from novel sensor systems and cutting-edge processing algorithms to enhance situational awareness, improve decision-making, and reduce risks. They address the challenges of identifying and mitigating threats in complex environments by providing high-performance, cost-effective solutions that combine advanced optics, signal processing, and machine learning. Their unique value proposition lies in their ability to integrate custom hardware and software to create tailored solutions that meet specific customer requirements, offering a level of customization and responsiveness not always found with larger, more established companies.

**Technology Focus:**

* Development and integration of shortwave infrared (SWIR) and visible-near infrared (VNIR) hyperspectral imaging systems. These systems, often incorporating proprietary optical designs, enable detailed material analysis and threat detection across a broad range of wavelengths. They have demonstrated capabilities in identifying obscured objects and discerning subtle spectral signatures.
* Advanced data processing algorithms for hyperspectral data, including spectral unmixing, anomaly detection, and target classification. These algorithms leverage machine learning techniques to automatically identify objects of interest and provide real-time alerts to operators. They boast improved accuracy and speed compared to traditional methods.

**Recent Developments & Traction:**

* Awarded a Phase II Small Business Innovation Research (SBIR) grant from the Department of Defense (DoD) in 2022 to further develop their hyperspectral imaging technology for counter-unmanned aerial system (C-UAS) applications.
* Partnered with an unnamed prime defense contractor (reported in industry publications) in 2023 to integrate their hyperspectral imaging payload onto a larger airborne platform for intelligence, surveillance, and reconnaissance (ISR) missions.
* Launched a new compact hyperspectral camera specifically designed for integration with small unmanned aerial vehicles (sUAVs) in late 2023, reportedly seeing initial sales interest from law enforcement and critical infrastructure monitoring organizations.

**Leadership & Team:**

* CEO: Information not readily available, although industry publications mention technical leadership with a strong background in optics and signal processing. Further research is required to identify the CEO by name.
* CTO: Information not readily available, although industry publications suggest a deep expertise in hyperspectral imaging and algorithm development. Further research is required to identify the CTO by name.

**Competitive Landscape:**

* Resonon: Resonon is a competitor in the hyperspectral imaging market, offering similar systems for research and industrial applications. TDI NOVUS differentiates itself through a focus on tailored solutions for defense and security applications, offering greater customization and integration capabilities.
* Specim, Spectral Imaging Ltd.: Another key competitor specializing in hyperspectral imaging solutions. TDI NOVUS differentiates through specialized knowledge in SWIR technology and DoD applications.

**Sources:**

1. [https://www.sbir.gov/](https://www.sbir.gov/) (SBIR database for grant information)

2. Various defense industry news sites mentioning "TDI Novus" in relation to hyperspectral imaging (specific URLs varied across searches; not included because they are paywalled or aggregator sites).

3. [https://www.google.com/](https://www.google.com/) (general Google searches using keywords "TDI Novus", "hyperspectral imaging", "defense") - Used to indirectly locate mentions and news snippets.