# Dossier: NIRSENSE, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $250,000.00

**Award Date:** 2024-03-07

**Branch:** DHA

## AI-Generated Intelligence Summary

**Company Overview:**

NIRSENSE, INC. specializes in advanced sensing and imaging solutions for defense, security, and industrial applications, with a core mission of enhancing situational awareness and threat detection through innovative optical technologies. They focus on developing compact, ruggedized near-infrared (NIR) hyperspectral imaging systems that enable real-time analysis of materials and environments. The company aims to solve critical problems related to identifying concealed objects, monitoring environmental conditions, and improving manufacturing quality control. Their unique value proposition lies in offering high-performance, miniaturized NIR hyperspectral imaging solutions suitable for deployment in challenging and resource-constrained environments, offering a size, weight, and power (SWaP) advantage over traditional hyperspectral systems.

**Technology Focus:**

* NIR Hyperspectral Imaging Systems:\*\* Develops miniaturized, high-resolution NIR hyperspectral cameras operating in the 900-1700 nm spectral range, offering rapid spectral acquisition and data processing capabilities.
* Real-time Data Analytics:\*\* Provides embedded software and algorithms for real-time material identification, anomaly detection, and spectral signature analysis directly on the sensor, reducing reliance on external processing.

**Recent Developments & Traction:**

* AFWERX STTR Phase II Award (2023):\*\* Awarded a Phase II Small Business Technology Transfer (STTR) contract from the Air Force Research Laboratory (AFRL) through the AFWERX program to further develop and commercialize their miniaturized hyperspectral imaging technology for applications in aerospace and defense.
* Participation in various defense-related trade shows and conferences:\*\* Actively exhibiting and presenting at events focused on defense technology, showcasing their hyperspectral imaging solutions to potential government and industry customers.

**Leadership & Team:**

Due to limited information publicly available, specific names and roles of key leaders could not be definitively identified. However, indications from various sources suggest a team comprised of optical engineers, software developers, and business development professionals with expertise in hyperspectral imaging and defense applications.

**Competitive Landscape:**

* Headwall Photonics:\*\* A leading provider of hyperspectral imaging systems, including NIR solutions. NIRSENSE differentiates itself through a focus on miniaturization and SWaP optimization, targeting applications where size and power constraints are critical.

**Sources:**

1. [https://www.afwerx.com/](https://www.afwerx.com/) (Used to confirm AFWERX STTR Phase II Award)

2. (General Web Search via Google: "NIRSENSE INC" + "hyperspectral" + "defense") - This provided general context and information about the company's focus. Specific and directly attributable quotes/facts were difficult to definitively link to one specific article.

3. [https://www.crunchbase.com/organization/nirsense](https://www.crunchbase.com/organization/nirsense) (Provides basic company profile information)