# Dossier: Prime Photonics, LC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $799,246.00

**Award Date:** 2023-01-12

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Prime Photonics, LC is a leading US-based technology company specializing in the development and manufacturing of advanced fiber optic sensing systems for harsh environment applications, primarily serving the aerospace, defense, and energy sectors. Their core mission is to provide robust, reliable, and high-performance sensing solutions that overcome the limitations of traditional electronic sensors in extreme conditions such as high temperatures, electromagnetic interference, and vibration. They aim to solve critical problems related to performance monitoring, structural health monitoring, and process control in demanding environments, offering a unique value proposition by enabling real-time data acquisition and analysis in situations where conventional sensors fail or provide inaccurate readings.

**Technology Focus:**

* Fiber Optic Sensing Systems:\*\* Prime Photonics develops and manufactures fiber optic-based sensor systems capable of measuring parameters such as temperature, strain, pressure, and vibration. These systems are designed for deployment in harsh environments where traditional electronic sensors are unsuitable. Their core technology utilizes fiber Bragg gratings (FBGs) and other fiber optic sensing techniques.
* Optical Interrogation Instruments:\*\* The company also provides optical interrogation units, which are instruments used to read and interpret the signals from the fiber optic sensors. These instruments are optimized for high speed, accuracy, and stability. Their Micron Optics heritage allows them to leverage advanced optical sensing interrogation techniques.

**Recent Developments & Traction:**

* Defense Contract Awards:\*\* Prime Photonics has secured multiple contracts with the US Department of Defense (DoD) and prime defense contractors for the development and deployment of fiber optic sensing systems in various military platforms and applications. Specific details on these contracts are typically confidential, but publicly available information indicates involvement in programs related to aircraft engine monitoring and structural health monitoring.
* Product Enhancements:\*\* Prime Photonics consistently enhances its product offerings. Their product roadmap includes improved robustness, higher sensitivity and enhanced accuracy for their sensing equipment to meet the ever-growing demanding applications.
* Expansion of Manufacturing Capabilities:\*\* Based on general industry news trends and job postings, Prime Photonics has shown evidence of expanding its manufacturing capabilities to keep up with ever-growing demand for their products.

**Leadership & Team:**

* Information on the precise current leadership team structure and names is limited in the public domain. The company's website lacks a dedicated "leadership" page. Inferred through available information, the team includes individuals with significant expertise in fiber optics, sensor technology, and aerospace engineering. Many have direct experience with developing and commercializing advanced sensing solutions for demanding applications.

**Competitive Landscape:**

* Luna Innovations Incorporated:\*\* Luna Innovations is a key competitor in the fiber optic sensing space, offering a broad range of sensing solutions for various industries, including aerospace and defense. Prime Photonics differentiates itself by focusing on niche high performance and extreme harsh environment solutions.

**Sources:**

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

2. Available Technical Papers via Google Scholar search for "Prime Photonics Fiber Optic Sensors" (provides technical depth on their products)

3. Government Contract Websites (e.g., SAM.gov) searches related to "Prime Photonics" (reveal DoD contracts - specific details often limited)