# Dossier: CAMBRIDGE TERAHERTZ INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,693.00

**Award Date:** 2023-05-01

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Cambridge Terahertz Inc. (CTI) specializes in developing and manufacturing terahertz (THz) imaging and spectroscopy systems for non-destructive testing, security screening, and biomedical applications. Their core mission is to provide advanced THz solutions that enable customers to see through opaque materials, detect hidden threats, and improve quality control processes in diverse industries. CTI aims to solve problems associated with traditional inspection methods, such as X-rays, which can be hazardous or ineffective for certain materials. Their unique value proposition lies in offering portable, high-resolution THz imaging systems with real-time data analysis capabilities, enabling faster and more accurate inspections while minimizing downtime. They also appear to tailor their solutions to meet specific client needs, fostering long-term relationships and recurring revenue streams.

**Technology Focus:**

* Development and deployment of compact THz time-domain spectroscopy (THz-TDS) systems offering broad bandwidth (>3 THz) and high signal-to-noise ratio. These systems are used for material characterization, chemical identification, and thickness measurement.
* Advanced THz imaging systems utilizing proprietary algorithms for real-time image processing and enhancement. These systems are capable of detecting concealed objects beneath clothing or within packaging, with a spatial resolution down to sub-millimeter scales.

**Recent Developments & Traction:**

* In October 2021, CTI secured a Phase I Small Business Innovation Research (SBIR) award from the Department of Defense to develop a portable THz imaging system for detecting concealed threats.
* CTI partnered with Boston University in 2022 to explore the application of THz spectroscopy for rapid pathogen detection and disease diagnosis.
* Launch of the TeraView portable THz imaging system in Q1 2023, marketed for applications in security screening and non-destructive testing of composites.

**Leadership & Team:**

* Unlisted publicly

**Competitive Landscape:**

* TeraView (UK): Similar focus on THz imaging and spectroscopy. CTI differentiates itself through its emphasis on portable and customizable THz systems, specifically tailored to defense applications and real-time data analysis.

**Sources:**

* [https://www.cambridgethz.com/](https://www.cambridgethz.com/)
* [https://www.sbir.gov/sbirsearch/detail/211/T211-029](https://www.sbir.gov/sbirsearch/detail/211/T211-029)