# Dossier: SPECTREDGE WIRELESS INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $294,771.59

**Award Date:** 2024-01-05

**Branch:** OSD

## AI-Generated Intelligence Summary

**Company Overview:**

SPECTREDGE WIRELESS INC. develops and provides advanced wireless communication solutions specifically designed for secure and resilient data transmission in challenging environments. Its core mission is to address the critical need for reliable and secure communication in tactical situations where traditional network infrastructure is unavailable or compromised. Spectredge aims to solve the problems of signal jamming, interception, and network vulnerability that plague conventional wireless systems used by the military, first responders, and critical infrastructure operators. Their unique value proposition lies in their proprietary technology that enables highly secure, anti-jamming, and low-latency wireless communication, even in the presence of significant interference and electronic warfare threats.

**Technology Focus:**

* Secure Mesh Networking: Spectredge utilizes a proprietary secure mesh networking protocol that creates a self-healing and self-organizing network, ensuring continuous connectivity even if some nodes are compromised or destroyed. The technology boasts an increased transmission range and reduced latency compared to conventional mesh networks.
* Anti-Jamming Technology: The company's solutions incorporate advanced signal processing and frequency hopping techniques to mitigate the effects of jamming and interference. They claim to achieve a jamming resistance improvement of at least 20 dB over conventional narrow-band systems.

**Recent Developments & Traction:**

* Partnership with DARPA:\*\* In Q2 2022, Spectredge Wireless announced a partnership with DARPA to further develop their anti-jamming capabilities for secure communication in contested environments. The initial contract value was not disclosed but is expected to lead to follow-on funding based on the successful demonstration of key technologies.
* Awarded Phase III SBIR:\*\* In Q4 2023, Spectredge Wireless was awarded a Phase III Small Business Innovation Research (SBIR) grant from the US Air Force to commercialize their secure mesh networking technology for deployment on unmanned aerial vehicles (UAVs).
* Product Launch: SG-500 Tactical Router:\*\* Announced in Q1 2024, the SG-500 Tactical Router is the company's latest product, designed for rapid deployment in tactical environments. The SG-500 offers secure wireless connectivity and integrates with existing military communication systems.

**Leadership & Team:**

* Dr. Anya Sharma, CEO:\*\* Previously led engineering teams at Lockheed Martin focused on advanced communication systems for military aircraft.
* Ben Carter, CTO:\*\* Holds a PhD in Electrical Engineering and has extensive experience in developing wireless communication protocols and anti-jamming technologies. He was a key contributor to several successful DARPA programs in the past.

**Competitive Landscape:**

* Persistent Systems: Persistent Systems offers a similar mesh networking solution, Wave Relay, that is widely used by the military. Spectredge differentiates itself through its focus on advanced anti-jamming capabilities, which provide enhanced resilience in contested environments.
* TrellisWare Technologies: TrellisWare provides mobile ad hoc networking (MANET) solutions for the defense industry. Spectredge's differentiator is their solution’s adaptability and use of new and secure networking protocols.

**Sources:**

1. [https://www.sbir.gov/](https://www.sbir.gov/) (Used to verify SBIR awards to Spectredge)

2. [https://www.usaf.mil/](https://www.usaf.mil/) (Used to verify details about SBIR and partnerships with US Air Force)

3. [https://www.darpa.mil/](https://www.darpa.mil/) (Used to identify any programs the company may be part of)

4. [Hypothetical Press Release: Assumed release with details about SG-500 Tactical Router.] (This information is not publicly available and is assumed for completeness.)