

Multi-Source / Multi-Protocol Tactical Situational Awareness Kit (TSAK)

### **FEATURES**

- Supports near-real-time and post-mission data ingest
- Web-based user interface, supports multiple local or remote users
- Near real-time dashboard allows the user to monitor activities at a glance
- Enhances collection with Advanced Data Analytics and Machine Learning
- Human Language Technologies (HLT) recognition
- Provides force protection by creating situational awareness alerts on events of interest
- Modular SWaP (size, weight & power) packaging
- Automated Data Export Feature (Filesystem, SMB Server, FTP Server, NFS Server)
- Removable SSD for secure data exfiltration and sanitization

# **KIT CONTENTS**

- SG1550 Receiver
- SG50x Analytics Processor: SG500 (Rugged Enclosure) or SG501 (Laptop)
- Polly Tactical Cellular Key Solving
- Tetley Hydra with 2 x Tetley Handy Phones Included (option up to 4 phones)

## **DESCRIPTION**

The VIRTUOSO SG1550 Multi-Source / Multi-Protocol Tactical Situational Awareness Kit (TSAK) is a modular system with a powerful collection of advanced processing components and sophisticated software that combine to comprehensively monitor the local 2G, 3G, and 4G wireless networks. 5G support coming in 2024. This modular system features a receiver, key solving capability as well as our industry leading tactical analysis software.

Once configured, the SG1550 vigilantly monitors, processes, organizes and stores the data of the local area. The SG1550 contains many powerful capabilities and innovations in an easy to set up package.



### SYSTEM RECEIVER

The SG1550 Receiver serves as the strictly passive receiver and is responsible for the survey and tuning of channels. The receiver houses all of the data until retrieved by the analytics. The receiver has 8TB of storage and provides coverage from 30MHz to 6GHz with 8 x 40MHz tuners. Wireless technologies include GSM, CDMA, UMTS, and LTE (5G in 2024)

5.125" H x 12.5" W x 16" L Size:

Weight: 21.6 lbs.

**Power:** 180 W, Input: 10 - 32 VDC



### SG50X ANALYTICS PROCESSOR

The SG50x Analytics Processor delivers a powerful suite of analytics tools in a stand-alone laptop or ruggedized enclosure. The web-based GUI can be accessed by multiple users from any web enabled device. The SG50x can be used simultaneously with multiple receivers in real time and can ingest post mission data collection for analysis.

\*SWaP will vary between enclosure options



### **POLLY TACTICAL KEY SOLVER**

The Polly Tactical is designed to be used in tandem with an SG50x Analytics Processor and SG1550 Receiver, with real-time or post-process data. Small size and low power allow the Polly Tactical to be used in any mission scenario including small team, untethered operations.



Weight: 9 lbs.

**Power:** 35W idle, 60W Peak, Input: 9 - 36 VDC



#### **TETLEY HYDRA**

The Tetley Hydra is a 2G/3G/4G (5G coming 2024) cellular network characterization and Non-Alerting Handset Stimulation tool that can measure multiple MNO's and RAT's simultaneously.



Weight: 4 lbs.

**Power:** 54.7W nominal, 109W Peak, Input: 9 - 36 VDC





**PROVIDING NEXT GENERATION WIRELESS SOLUTIONS**