

Mod Payload DPTT/2G-5G Collection Receiver with DPTT/Cellular Discovery and Cellular Network Mapping

# **FEATURES**

### **COLLECTION:**

- Wireless network collection of GSM, CDMA, UMTS, LTE, 5GNR, DMR, P25, NXDN, AM, FM
- Features 3 x 200Mhz tuners
- Frequency range of 75Mhz 6GHz
- Supports real-time and post mission data offload
- Automated export

## SURVEY:

- Simultaneous multi-band, multi-format completely passive machine learning (ML) enabled network survey solution
- Support for GSM, GPRS, EDGE, CDMA2000, 1xRTT, EvDO, WCDMA, HSxPA, LTE, 5G NR, WiMAX, PTT, D-PTT
- Decodes all Broadcast Overhead messages (MIBs, SIBs, etc.)
- Geofence and time-based

# **KIT CONTENTS**

- AERAS 2U Receiver
- Mod Payload Compliant omni-directional Cellular Antennas
- Cable assembly to conduct bench testing
- Mission Laptop

## **APPLICATIONS**

- Cellular Network Survey and Mapping
- Cellular Collection
- Digital Push-To-Talk (DPTT) Collection
- Local or Remote operations via Networking Kit
- Seamless inter-operability with the SG1550 Family of Systems

#### **DESCRIPTION**

AERAS 2U is the quintessential do-it-all system for small form-factor drive survey and collection. From Phase 0 survey operations for both cellular and DPTT to all formats of cellular and DPTT collection; the AERAS 2U is design to exceedingly perform both tasks. AERAS 2U utilizes G3T's industry proven and USSOCOM Program of Record Tetley Scanner software, paired with G3T designed and in-house built direct conversion tuners to deliver high fidelity cellular survey. AERAS 2U provides coverage from 75MHz to 6GHz with a 3 x 200MHz tuner configuration allowing coverage of multiple bands throughout the spectrum. Data files are outputted in .G3NS and .GNS formats and compatible with both ROVER and RAPTORX. The receiver houses all of the data until offloaded or retrieved by the user or by automated analytics systems.

Wireless technologies include GSM, CDMA, UMTS, LTE, and 5G. AERAS 2U monitors and decodes Uplink (UL) and Downlink (DL) messages simultaneously, providing for soft geo-location of user equipment (UE) operating with. AERAS 2U is interoperable and interchangeable within the G3T Collection & Analytics ecosystem. Additionally, incorporating G3T's Non-Alerting Techniques (NATs) and active network characterization tools (HYDRA/TETLEY HANDY) enables extremely refined UE location.

AERAS 2U is also capable of collecting DPTT (DMR/P25/NXDN/AM/FM) and feeding the data into our Tactalytics data analysis platform. Tactalytics provides precise DMR network link analysis, Pattern Of Life (POL), voice analysis tools and exact metadata to bring the user absolute ground truth on DPTT transmissions and networks. With 3TB of storage the receiver can capture over a billion data records which allows for long term remote or unattended data collection.

SWaP Protocol Channel Count

Size 4.29"W x 3.04" H x 6.25" D GSM 128 DDC/ 128 Demod

Weight 2.5 lbs

**Radio Specifications** 

Power 95W (requires 2 MAIM connections) CDMA FWD Only - 18 Channels, 18 PNs, Max of 6 PNs per Channel

18-36 VDC FWD/REV - 9 Channels, 18 PNs, Max of 6 PNs per Channel

UMTS FWD Only - 6 Channels, 9 PSCs, Max of 3 PSCs per Channel

FWD/REV - 3 Channels, 6 PNs, Max of 3 PSCs per Channel

Tuners 3 x 200MHz
Freq Range 75 MHz - 6GHz LTE FWD Only - 12 Channels, 12 PCIs, Max of 4 PCIs per Channel

Storage 3 TB FWD/REV - 6 Channels, 8 PCIs, Max of 4 PCIs per Channel

BANDS

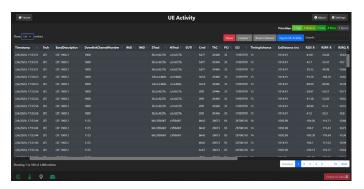
5G NR

FWD Only - 12 Channels, 12 PCIs, Max of 4 PCIs per Channel

**2G/GSM** - 850/900/1800/1900 FWD/REV - 6 Channels, 8 PCIs, Max of 4 PCIs per Channel

**2G/CDMA** - 450/850/1900

3G/UMTS - All commercially available UMTS bands



User Interface



**PROVIDING NEXT GENERATION WIRELESS SOLUTIONS**