# FASTRAK<sup>TM</sup> TRACE

Tactical Reconnaissance and Analysis of Communications Emissions



TSC's FASTRAK™ TRACE expands on our proven Low-Vis platform with a ruggedized, mission-ready solution for WiFi and cellular signal collection. Designed for harsh and contested environments, these compact, low-power devices deliver reliable performance in tactical operations.

Built on a common core architecture, TRACE features a durable enclosure suited for integration into field gear or standalone use. Whether integrated into tactical gear or standalone, these devices deliver reliable performance during real world operations.

To learn more, contact Fastrak-sales@tsc.com

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## **FASTRAK™ TRACE**

#### **SPECS**

Dimensions	• 7"x6"x1"
Weight	• Less than 1lb

#### **CAPABILITIES**

Multi-signal Capabilities	<ul><li>Simultaneous WiFi and cellular survey</li><li>Future path to incorporate Bluetooth</li><li>Can support other signals through SDR</li></ul>
Passive or Active Operation	<ul> <li>Active or passive WiFi and passive cellular survey and collection</li> <li>Active WiFi client deauthentication</li> <li>Active IMSI/MAC correlation</li> </ul>
Power Consumption	<ul> <li>Less than 2-5W total power consumption depending on function</li> <li>6+ hours runtime on a single charge with current battery configurations</li> </ul>
Embedded CPU/FPGA	<ul> <li>Xilinx UltraScale+ (XCZU3EG) provides quad-core ARM + FPGA for applications</li> <li>Open architecture and APIs enable adaptation to custom SOI(s) and applications</li> </ul>
Sensors	<ul> <li>Single channel SDR transceiver (70 MHz - 6 GHz with &gt;40 MHz IBW)</li> <li>Single WiFi SOC</li> </ul>
User Interface	Thin client web UI     Supports headless/unattended operation
GPS	Built in GPS for location tagging and geofencing
Platform Security Features	<ul> <li>Encrypted filesystem with secure key storage and tamper protection</li> </ul>
Post-Mission Data Analysis	<ul> <li>Area/time emitter correlation</li> <li>Tail detection / counter surveillance features</li> <li>Interactive map display</li> <li>Fusion of inputs from multiple sensors including Keyw Samuria, QRC QP, Rover Handheld, SWX, and SRT Landshark</li> </ul>

#### **COMMON USE CASES**

- Portable scenarios where discrete operation is required
- Passive data collection for post-mission analysis to aid in environmental characterization, target development, or counter surveillance detection.
- Actively support target detection and tracking of adversary signals.
- Custom specific applications can enable new capabilities exploiting additional SOI or techniques by leveraging the flexible SDR or open interfaces to the WLAN device.

### **COMPREHENSIVE TRAINING**

TSC provides comprehensive training services customized to the needs of each customer, product, and mission. Instructor led training may include:

- Classroom instruction covering specific signal theory
- Kit contents and assembly
- Software upgrade procedures
- User interface operation
- Integration with complementary third-party analysis tools.

Hands-on training exercising practical application of the technology in realistic environments with controlled or uncontrolled target devices is also offered. Training instructors include TSC personnel with intimate knowledge of the technology and intended application of the tools, but may also leverage third party training partners who bring previous operational experience and firsthand knowledge of user group TTPs.

All products include lifetime technical support and software updates.

