FASTRAKTM Low-Vis

Low Power, Discrete, Wearable WiFi / Bluetooth / Cellular Search, Survey, Geolocation and Collection Systems



TSC's FASTRAK™ Low-Vis products are small, low power, discrete, wearable devices providing survey and collection capability for WiFi and cellular signals.

These TRL-9 products leverage common core internal components embedded in custom enclosures or host devices and are designed for clandestine operation in non-permissive or otherwise sensitive environments. TSC currently produces several, customer-specific, Low-Vis form factors that are deployed by multiple user groups.

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

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FASTRAK LOW-VIS PLATFORM(S) CAPABILITIES

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

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.

