

TECHNOLOGY READINESS LEVEL: 8

US PATENT # 8,185,101

DEVICE PROVEN TO WORK IN ITS FIELD OF USE UNDER EXPECTED CONDITIONS; HAS ACHIEVED ACTUAL SYSTEM COMPLETION.

TECHNOLOGY SUMMARY

The TacNet Tracker is designed to transport information securely via portable handheld units without the need for fixed infrastructure. The low profile device is easily worn to provide users with real-time location tracking, communication with other users, and shared information along a secure encrypted self-forming and self-healing network. This line-of-sight network is essentially a custom, privately owned Internet with the capability to self-form on a second-to-second basis. If a unit becomes separated (e.g., line-of-sight is lost), the remaining components “self-heal” the network by forming another path. Because of the mesh network’s multi-hopping capabilities, the TacNet Tracker can create secure paths around obstructions that might hinder a regular radio.

The device has similar communication and data-sharing capabilities as a laptop computer, but in a much more compact, lightweight format—approximately the size of a smartphone. The TacNet Tracker also provides additional functionalities—including Bluetooth communications, USB ports, and tracking with GPS or mesh positioning.



POTENTIAL APPLICATIONS

- Corrections-Jails/Prisons
- Military
- Law Enforcement
- First Responders
- Mining Industry
- Secured Access Facilities

**TECHNOLOGICAL
BENEFITS**

- Secure Encryption
- Lightweight and Portable
- Tracking via GPS or Mesh Positioning
- COTS Components and Customizable Software
- Lower-Cost Manufacturing

TECHNOLOGY INQUIRY?

For more information or licensing opportunities contact us at

ip@sandia.gov

Refer to SD # 10236

OR

<https://ip.sandia.gov>