

ThinkRF™ Enables Continuous Technical Surveillance Countermeasures for Large National Intelligence Agency



National security depends on protecting sensitive information and preventing espionage and surveillance from adversarial governments or other attackers. Due to the sensitive nature of their work, a large National Intelligence Agency needed to ensure that their buildings, facilities, and meeting rooms were secure against any kind of RF surveillance device, such as listening devices, bugs, unauthorized access points, mobile phones, or other devices capable of transmitting information to outside actors.

The agency required a system for continuous spectrum monitoring in addition to their current security procedures.

APPLICATIONS

Technical Surveillance Countermeasures (TSCM)

Bug Detection

Continuous Spectrum Monitoring



The Scenario

As part of its standard security measures, the Intelligence Agency already had a number of procedures and protocols in place to mitigate the risk of surveillance devices. These included restricting cell phones and mobile devices in certain secure areas and conducting regular bug sweeps using handheld detection equipment.

However, these methods do not fully secure against potential threats. For example, employees may, accidentally or intentionally, fail to check-in their devices before entering a room, while modern listening devices may only transmit at infrequent or irregular times to reduce the chance of being detected during a traditional sweep.

To further improve security, the agency required a system for 24/7 continuous, in-place monitoring made up of a number of sensors dispersed around the premises. The system needed to detect unauthorized transmissions, integrate with leading TSCM software, and provide real-time alerts so that unauthorized devices could be located and disrupted before sensitive information was lost.

The Requirements

Ability to deploy multiple units in the building and monitor from a single location

Rapid sweep rate to improve likelihood of detection for short duration or intermittent signals

Real-time triggering and alerts

Integration with leading, third party TSCM software applications

The Solution

The National Intelligence Agency selected ThinkRF™ in conjunction with a leading third-party provider of TSCM software. The ThinkRF Surveillance System provided the performance, coverage, and capabilities required by the agency, and because it is fully integrated with the TSCM software it is more cost effective and easier to deploy.

The system is comprised of the compact and networkable ThinkRF Real-Time Spectrum Analyzer for distributed deployment, allowing multiple units to be deployed throughout the premises and monitored from a single location. Users are alerted whenever an unknown signal appears, while the third-party software allows for in-depth signal analysis to determine the source. Traditional bug sweeping techniques can then be used to locate the device and disable it.



ThinkRF Surveillance System Features

Up to 27 GHz frequency range and 100 MHz real-time bandwidth

28 GHz/s sweep rate to detect short duration, low powered, and intermittent signals

Cost-effective, compact platform

Networked for distributed deployment across the entire premises

Fully integrated with leading third-party software for a complete TSCM solution



The Results

The National Intelligence Agency successfully deployed the solution and are secured against malicious surveillance devices and espionage. The system detects unauthorized RF signals and alerts security who can locate the device. This ensures areas where sensitive information is discussed are secure, and that this information is not being leaked to adversaries.



ABOUT THINKRF

ThinkRF is the leader in software-defined spectrum analysis solutions that monitor, detect and analyze complex waveforms in today's rapidly evolving wireless landscape. Built on patented technology and quality by design principles, the ThinkRF platform offers greater versatility, better performance and additional capabilities for 5G, monitoring, signals intelligence (SIGINT), technical surveillance countermeasures (TSCM), and test and measurement applications. Aerospace and defense companies, spectrum regulators and wireless communications providers use the remotely deployable, PC-driven and easily-upgraded platform to replace traditional lab equipment for wireless spectrum analysis.

For more information, visit www.thinkrf.com, contact info@thinkrf.com or on Twitter, LinkedIn and YouTube.