Application Note

Remote Operation With PeakAbout App

Applications: Isotope Identification, Hazmat,
Products: SAM 950, SAMpack 120, SAMmobile 150

Release Date: August 2019

Purpose

This application note describes the new release of the PeakAbout app, which allows users to operate their RIID from a secondary smartphone. This allows for secure, safe operation.

Introduction

The SAM 950 is the culmination of almost 20 years of Radioisotope Identification. The advanced system is built on a cellular platform allowing for a host of modern features to complement health physics and isotope identification requirements. While the internal spectroscopy uses unique wavelet technology and powerful algorithms, the user interface is easy to understand and it is loaded with useful tools to make the disposition of radiation alarms efficient and reliable.

A new release of the PeakAbout app this summer enables existing and new users of the SAM 950 to operate the RIID from a secondary smartphone locally (30ft. range) or via cellular or Wi-Fi at a remote reach-back facility. I will demonstrate with a simple Spectrum Techniques Cesium source.

During routine inspection or monitoring, the SAM 950 will react to a radiation source before any other RIID. That is because the SAM 950 is the only RIID available today with an internal 3x3 scintillation crystal, translating to about 8x the crystal volume of a 2x2 detector. The finder mode on the SAM allows you to quickly isolate the source, whether it be a package, a bag, or even a localized area within a vehicle.

Analysis Option 1

At this point, you can either begin local analysis with standoff using Bluetooth or transfer access and control to your reach-back team using local Wi-Fi or cellular. For local analysis, connect your remote device using the PeakAbout app, to the RIID and re-calibrate if needed. Then set your RIID down close to the target source and move back to a safer distance. We know from the Inverse Square Law that radiation exposure is exponentially reduced with each step you take away from the source. You can now review alarming the SAM 950 and manage the situation, complete with ANSI reports, pictures, and location data.

Analysis Option 2

Your second option is to allow your reach-back team control of the RIID from a remote location. The RIID uses a 4G/LTE connection or local Wi-Fi to enable complete access from any Reach-back professionals. Notify your team and they can open PeakAbout and log into your RIID and take over critical operations. The SAM 950 continues to evolve in order to address growing and changing requirements, from remote fleet updates to the library and isotope modifications to telemetry and shared communications.

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