

# The Next Generation in Explosives Detection

## Quantum Sniffer QS-H150™ Portable Explosives Detector

### Real Time Explosives Trace Detection

#### Quantum Sniffer Technology

The Quantum Sniffer employs a novel technology for the detection of explosives vapors that is more sensitive than existing detection devices. The advanced technique detects the presence of parts per trillion (ppt) of explosives molecules without physical contact and in real time. The unique patented vortex sample acquisition system collects the sample, ionizes it with the unique QS electro optical ionization scheme, identifies the sample via standard ion mobility technology and, if an explosive is present, will produce a visual and audible alarm. The LCD will display the identity of the explosive present and the audible alarm can be switched off if required. Quantum Sniffer is the only Explosive Trace Detector with true automatic self calibration – no user intervention required.

#### QS-H150

The QS-H150 Portable Explosives Trace Detector was developed in conjunction with the U.S. Navy (NCIS and NAVEOD-TECHDIV) and PSEAG. The device is capable of detecting trace amounts of most commercial and military explosives, including RDX, PETN, HMX, TNT, Black Powder and Ammonium Nitrate at nanogram level concentrations.

The detection is “real time” with immediate cleardown which dramatically improves throughput. The instrument is non-contact and does not use expensive consumables. The QS-H150 uses a proprietary opto/electrical ionization technique rather than a radioactive source for ionization and hence there is no need to deal with complicated NRC regulatory requirements.



#### Product Features

- ❖ Novel Ionization Technology, No Radioactive Source
- ❖ True Automatic Continuous Self Calibration
- ❖ Real Time Detection
- ❖ Substance Identification
- ❖ Minimal Maintenance Requirements
- ❖ 8-Hour Battery Operation
- ❖ Easy Downloading of Alarm and Data Files
- ❖ Low Annual Operating Cost



## Specifications

Detector Type	Ion Mobility Spectrometry (IMS) original, non-radioactive ionization (Patent #6828795)
Sensitivity	Vapors: ppt (parts per trillion) Particles: pg-ng levels
Selectivity	Less than 1% false positive
Analysis Time	Real time (1-5 seconds)
Cleardown Time	Immediate
Sample Acquisition	Vapor collection from low levels of contamination via unique patented "tornado" sample acquisition system at a distance of 1/2 to 3" (1 to 8 cm). Particle and large surface collecting via contact wiping.
Warm Up Time	15 Minutes from "switch-on"
Power	4-hour re-chargeable battery AC power cord 110/240 VAC, 50/60 Hz 12 VDC, vehicle adapter
Signal Processing	Real time analysis Visual alarm and settable audible alarm
Identifiable Substances	Semtex, C4, RDX, NC, PETN, EGDN, TNT, Dynamite, HMX ANFO, Smokeless Powder, Black Powder, and others via simple sample substance addition. User expandable substance library
Calibration	Continuous automatic self calibration
Dimensions	19.4" L x 5"W x 7.4"
Weight	12 lbs with 4-hour battery

## Solutions

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