HazMatID[™] Elite

HOTZONE HANDHELD FTIR CHEMICAL IDENTIFIER



Feature Highlights

- Optimized for easy operation in personal protective gear
- MIL-STD-810G certified for use in harsh conditions and hightemperature operation
- Integrated pressure device for analysis of solid materials, plus direct touch-to-sample capability
- Automated analysis of mixtures with available priority alerting for explosives, CWAs, TICs, and parcetics
- Embedded Wireless Data Transmission

HazMatID Elite is a next-generation handheld unknown solid and liquid chemical identifier that combines high performance with simplicity and performs an analysis in 1 minute or less. Using Fourier Transform Infrared (FTIR) spectroscopy, HazMatID Elite is capable of identifying chemical warfare agents, explosives, toxic industrial chemicals, narcotics, suspicious powders, among other dangerous chemical classes.

Analysis is performed by placing a small amount of unknown substance onto the diamond ATR sensor and applying pressure with an integrated press for solid samples. The sample interface also includes an integrated well for the containment of liquid samples. A second, touch-to-sample, diamond ATR interface is available for rapid analysis of pooled liquids and surface films, and enables robotics applications.

MIL-STD-810G certified for operation in harsh conditions, HazMatID Elite has the widest thermal and solar operational range of any portable or handheld chemical identifier. Its revolutionary optical engine also provides high vibration immunity and resistance to mechanical disturbances seen during vehicle or human transport.

The HazMatID Elite user interface contains a large display screen with a high viewing angle and visibility in direct sunlight conditions, large keypad controls for effective operation in protective gear, and an intuitive software workflow design. On-screen instructional graphics guide users through the essential operations of the device to maximize ease-of-use and reduce the training burden for security personnel.

Long-range, embedded RF wireless transmission is also included for rapid communication of data out of the hotzone to aid in information integration, decision making, and connection to ReachBackID $^{\rm m}$ 24/7/365 support services. PC-based command software provides advanced data handling capabilities for specialized users.

General Specifications	
Technology	Fourier-Transform Infrared Spectroscopy
Size	26.9 x 14.3 x 7.9 (10 ^{5/8} x 5 ^{5/8} x 3 ^{1/8} in)
Weight	2.29 kg (5.05 lbs.)
Sample interface	Diamond ATR sensor with integrated solid press and liquids well
	Second, touch-to-sample diamond ATR sensor for direct sampling
Decon	IP-67 rated and sealed for decontamination by immersion
Operational ranges	Operational in extreme weather and temperatures ranging from -20°C to 50°C (-4°F to 122°F).
	Humidity ranging from 0-100%
User interface	4.3 inches internally-bonded LCD color display for high visibility in direct sunlight conditions
	Individually-lit keypad and instructional graphics guide users through the operation of the device
Power	Rechargeable lithium-ion battery for 4 hours operation
	Disposable 123A battery compatible
	External IP-67 rated connector for mains or automobile power
Wireless	Embedded RF modem for 1 km line-of-sight data transfer*
	FIPS 140-2 compliant encryption
	GPS included
External data storage	Full USB support
Libraries	10,000 spectra of chemical warfare agents, explosives, narcotics, TICs, pesticides, white powder, and other
	chemical classes. User-defined libraries transferable from the HazMatID
Available Options	
Command PC software	Advanced software package for data management and spectral reprocessing against upgraded databases
	(up to 35,000 spectra)
Repeater	RF repeater for extending the wireless data transfer range
Colors	Olive drab or yellow
ClearSampler [™]	ATR/FTIR surface sampling accessory for decon verification, explosives analysis and hazardous materials
	assessment

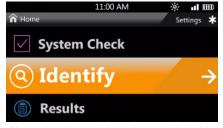
^{*} A 1 km range is only achievable under optimal conditions: clean line-of-site, atmospheric conditions, etc.



 $Simplified \ user \ interface \ requires \ minimal \ training$



Instructional graphics guide users through device operation



Clear and precise analysis results to enable decisive actions





