smiths detection
bringing technology to life

MMTD™

MULTI MODE THREAT DETECTOR

Feature Highlights

- **Rugged handheld detector that identifies explosives, narcotics, TICs and CWAs in one system**
- **Simultaneous detection and identification of explosives and narcotics from a single sample**
- **Proprietary scan sequencing to detect conventional and home-made explosives**
- **Truncated alarm for faster clear down**
- **Remote, unattended operation capability with Wi-Fi/Ethernet**

The Multi Mode Threat Detector (MMTD) takes portable threat detection to a new level without compromising portability or functionality. Designed to IP54 rating for operation in extreme environmental conditions, the MMTD is a rugged, portable hand-held system for the rapid detection and identification of explosives, narcotics or CWA/TICs, featuring an optimized detection capability for peroxides, taggants and methamphetamine precursors.

Four operating modes are available, including a dual mode setting for simultaneous detection of explosives and narcotics from one sample. Operators can also quickly switch between particle or vapor analysis methods to utilize the best method for detecting the suspected threat.

Other features include up to five hours of uninterrupted operation with the two hot-swappable batteries (included); remote, unattended operation for one or more units with alarm and status information reported to Command & Control via Wi-Fi/Ethernet; unlimited data storage via SD card; and USB port for exporting results. The included software allows advanced operators to perform more in-depth data analyses and print results via network connection.

The MMTD is for anyone who needs a handheld system to detect a broad range of threats. Its tough exterior design is ideal for the soldier on the front line and the security agent working in harsh elements (e.g. Border/Ports). Its wide range threat detection capability and portability makes it ideal for aviation, special event and border security.

The MMTD is powered by Smiths Detection proven Ion Mobility Spectrometry (IMS)

Continued overleaf

MMTD

technology, trusted by the military, law enforcement and government agencies worldwide.

Remote Capability
The MMTD is capable of remote, unattended operation with alarm and status information reported via Wi-Fi or Ethernet. Supervisors can monitor status/alarms from multiple MMTD units simultaneously.

Automatic Self Calibrating
The MMTD monitors its environment, senses changes that would affect its accuracy and re-calibrates accordingly. There are no calibration consumables or daily maintenance procedures for calibration.

Data Storage
Because the MMTD uses a standard SD memory card, unlimited data storage is possible. Results can also be exported via USB, SD or Ethernet ports. The USB stick provides easy transfer from the SD card, as well as alarm data on-the-go for supervisors.

Quick Switch Sampling Modes
There is no down time when switching between vapor and particle sampling modes. A quick switch and the system is ready to begin analyzing.

Advanced Windows CE Interface
Currently available in English, Spanish, French and German. Advanced detector controller software offers convenient access to plasmagram display and analysis tools and diagnostics.

Expandable Library
The threat library is user expandable to program new threats.

Rugged for Outdoor Operation
The smart-safe battery has integrated LED display for immediate display of battery level. The toughened screen protects against accidental drops of tools or objects. The MMTD can withstand a 3' (1 meter) drop to concrete, and has the ability to operate in sand, rain and wind conditions.

NRC Exemption
No periodic radiation leak tests are required in the United States. Operators outside the United States should check with their radiation safety agency for local requirements.

Technical Data

General Specifications

Technology	Ion Mobility Spectrometry (IMS)
Radiation source	^{63}Ni, sealed 15 mCi
Sample collection	Trace Particle and Vapor
Operating modes	Simultaneous explosives/narcotics, explosives only, narcotics only, Chemical warfare agents/toxic industrial chemicals
Explosives detected	RDX, PETN, TNT, TATP, NG, H_20_2, EGDN and others
Narcotics detected	Cocaine, Heroin, Methamphetamine (including precursors), THC and others
CWAs detected	Nerve and blister agents such as Tabun, Sarin, Soman, Cyclosarin, Agent VX and V_X
TICs detected	Hydrogen Cyanide (HCN), Phosgene, $S0_2$, NH_3 and others
Sensitivity	Particle: low nanogram (ng) range. Vapor: low parts per million (ppm) range
False alarm rate	Less than 1%
Programmable channels	Over 40
Input power	90-264VAC, 1.6A, 47-63Hz
Warm up time	Less than 10 minutes
Analysis time	Less than 10 seconds
Battery operating time	5 hours (with two 2.5 hour hot-swap batteries included)
Alarm type	Audio and visual, with substance identification
Display	8.89cm (3.5in) color TFT LCD
Data storage	2 GB SD card included
Dimensions (W x H x D)	48,3 x 21,6 x 20,3cm (19" x 8.5x 8in)
Weight	5kg (11lbs), including 2.5 hour hot swap battery
Operating temperature range	-7°C to 55°C (20°F to 131°F)
Operating humidity	0 to 95% non-condensing
Hardened specifications	1 meter (3') drop to concrete, ability to operate in sand, rain, wind conditions. (IP54 operating, IP53 sampling)

For product information, sales or service, please go to www.smithsdetection.com/locations

Smiths Detection, Canada 7030 Century Avenue, Mississauga, ON Canada L5N 2V8

smiths detection