

THREAT ID

The most advanced FTIR chemical analyzer for identifying chemical threats.



explosives
detection

ThreatID is the state-of-the-art chemical identifier, designed with input from first responders from all over the world. The superior performance, ergonomics, and usability of ThreatID supports higher confidence in identification of unknowns and quicker decision-making.

- Field-based threat assessment and identification of unknown solids and liquids.
- Largest spectra library and hazard database (23,000+) of any portable FTIR
- Multi-tiered data analysis, with variable investigative methods.
- 24/7/365 Reachback support
- 40% smaller than existing suitcase systems
- Designed for both hot and warm zone use
- Real-time zoom and spectral manipulation on industry-leading 10" display screen
- 4+ hour battery life with in-field "hot-swap" capability
- Fully decontaminable system
- Advanced tools for resolving mixtures (Automated Mixture Analysis, Functional Group classification, Residual Search, removal of common interferants)

Go beyond the spectrum. Make your first response the correct response.

Any substance in contact with the diamond surface is interrogated by IR energy and a spectrum is acquired that is a characteristic pattern of the substance. In seconds, this IR "fingerprint" is automatically compared with libraries of digital reference spectra - Toxic Industrial Chemicals (TICs), Narcotics (including Fentanyl), Explosives, Pesticides, Weapons of Mass Destruction, Chemical Warfare Agents, and common household chemicals.

ThreatID comes standard with more than 23,000 reference spectra of pure substances and common mixtures including WMD's (w/ Novichok agents), explosives and drugs including fentanyl & fentanyl derivatives. All library spectra are matched to RedWave's proprietary onboard chemical information database, ThreatAssist™. Web-based chemical informational databases such as NIOSH, PubChem and WISER are automatically searched with push-button links for all library files as well.

The ThreatAssist onboard database provides additional information on any library entry such as chemical name, synonyms, common use, hazards and PPE as well as many more chemical-specific properties. With the click of a button, all information about the sample and spectrometer, including spectra, library hits, data manipulation, system health and date/time of sample acquisition can be sent via email, directly from the spectrometer.





Designed for use with Level-A Protection Gear



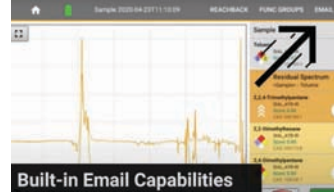
Chemically hardened and ruggedized, with innovative enhancements for ease of use (i.e., Sure-Contact pressure device)

On-screen tutorials & user prompts pre-loaded



In-depth tutorial videos, user manuals etc. pre-loaded on ThreatID™ for reference in-field.

Push-button data transmission



One-button email feature to instantly send data to Incident Command and Reachback Support

24/7/365 Reachback Support



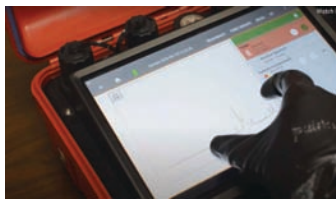
All customers get round-the-clock Reachback Support for help with: hardware, software, and advanced spectral interpretation.

Waterproof, immersible decontamination



Rugged diamond ATR sample interface, fully waterproof, chemically hardened glass display for durability.

10" display & pinch to zoom spectral manipulation



Data manipulation provide increased confidence using features such as spectral overlays, residual search, library and functional group hit validation

Hotzone-ready, 4+ hours of full connectivity



Ethernet, Bluetooth, WIFI and Hotspot connectivity. 4+ hrs of battery life with integrated battery and additional hot-swappable batteries.

Lowest detection limits of portable analyzers



Advanced algorithms allow for lower detection limits and ability to identify 2nd and 3rd compounds in mixture analysis.



Built-in hazard information at your fingertips.

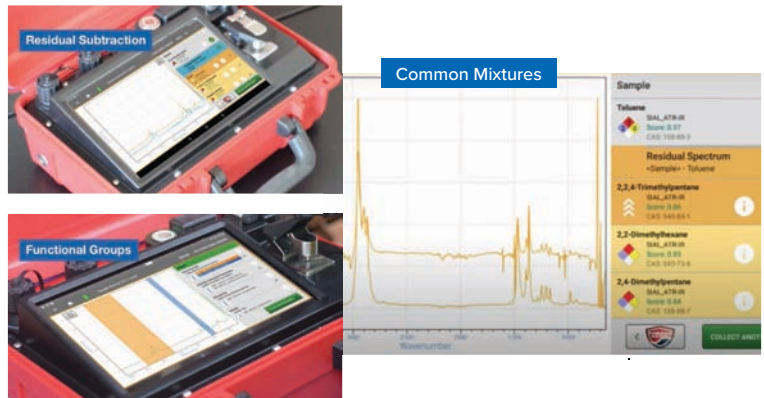
ThreatID features our built-in hazard information database, ThreatAssist. It provides you with information to help remediate the incident and keep your community safe. It includes:

- Synonyms
- Description
- Uses
- Hazards
- LEL
- UEL
- IDLH
- Melting Point
- Boiling Point
- Flash Point
- Solubility
- Vapor Pressure
- Vapor Density
- Specific Gravity
- ... and more ...

Classifications of unknown mixtures

One of the more powerful features of the ThreatID is its ability to classify mixtures and take a multi-tiered path to identification of chemical threats. We do this in various ways, starting with matching your sample against our large common mixture library which features thousands of chemical mixtures commonly found on the market today. From there, we perform automated mixture analysis, manual residual searches, and the ability to overlay and identify functional groups.

- Common Mixture Database
- Residual Subtraction & Analysis
- Functional Groups
- Library Text Search
- Spectrum Compare
- Automated Mixture Analysis





Detailed Specifications

Functional

Analyses: Liquids and Solids ID

1 reflection diamond ATR with lever-actuated pressure device

Weight: 15 pounds

Dimensions: 14" x 10.6" x 6.12"

Operating System: Android

Display: 10" (diagonal), HDMI PCAP w/ chemical hardened glass

Operable with finger, gloved finger or stylus

Quad-Core 64-bit CPU, 4GB RAM, 64GB SSD

Integrated video microscopy with digital image capture

USB 2.0 interface, data downloadable to memory stick

Internet connectivity via Wi-Fi, Hotspot or Ethernet

Upgradeable libraries

Visible threat alarm

4+ hour battery life with Hot-Swappable Li-ion batteries

IP67 power connector

802.11 g wireless, Bluetooth

WPA2 security protocol

Operable in PPE and Level A gear

CE Mark certification

Performance

Designed for both hot and warm zone use

Fast, large diameter optics for better quality spectra

Improved mixture analysis and search algorithms

Innovative Sure-Contact™ pressure device for solids

Advanced background check for cleanliness

Full spectra overlays, subtractions, residual search

Functional group classification overlays on screen

One-button water removal from spectra

One-button "auto-email" instantly to send your data

Archival and search of previous incidents

One-touch look-up of chemical properties

One-touch reporting: export via email or USB download

24/7/365 Reachback Support

Ergonomics

Responsive to nitrile, tyvek or butyl gloves

Real-time zoom and spectral manipulation on display

Fully decontaminable system

In-depth tutorial videos, user manuals, etc. on-board

