



FTIR spectrometer

Handheld FTIR for chemical and explosive identification

Thermo Scientific TruDefender FTX

Accurately identify unknown chemicals and explosives in the field

When faced with unknown chemicals or explosives in the field, rapid, accurate identification is critical. With Thermo Scientific™ TruDefender™ analyzers, teams obtain the reliable identification they need to protect themselves, mitigate the scene and safely execute their mission.

Key Benefits:

- **Fast, accurate identification.** Returns results in seconds, even for complex mixtures.
- **Easy to use.** Intuitive, menu-driven interface for fast training and proficiency.
- **Improved sampling.** Large sampling surface and fully rotational anvil for easy sample placement.
- **Built for field use.** Smallest, lightest military-rugged FTIR spectrometer on the market. Certified to MIL-STD 810G for ruggedness.
- **Easy to clean.** Contoured edges and self-contained anvil mechanism ensure easy decontamination.
- **Worry-free maintenance.** Requires no scheduled maintenance, calibration, warm up or mirror alignment.
- **Data integrity.** Easily transfer of . SPC files to preserve maximum details and analyze through Thermo Scientific™ OMNIC™ and other third party software.
- **Light weight.** TruDefender FTX is less than 1.5 kg
- **Onboard mixture analysis.** Sophisticated algorithms automatically determine presence of mixed and contaminated chemicals.
- **Flip screen.** For easy reading during a scan.



Clear analysis results require no user interpretation.

Session001 : Scan007

Cyclosarin (GF)
AKA: Cyclosin, CMPF
CAS: 329-99-7



1 match found

Scan results

Name Weight, 96% total

Acetone 54%
ITF-40, EPA HVP, Household/Commercial
CAS: 67-64-1



Pseudoephedrine

Potential Mixture Identified

Session001 : Scan014

Ethylbenzene
EPA-HVP 1990, ITF-40, NIOSH, UN
CAS: 100-41-4



A similar item found; verify with other means



Thermo Scientific TruDefender FTX

Specifications	TruDefender FTX
Weight	3.12 lb (1.41kg)
Size	8.9 x 4.5 x 2.1 in (22.61 x 11.43 x 5.33cm)
Spectral range	4,000cm ⁻¹ to 650cm ⁻¹
Spectral resolution	4cm ⁻¹
Collection optics	Solid Diamond Crystal ATR
Operating frequency	n/a
Survivability	Independently tested for MIL-STD-810G and IP67 certification
Data export formats	SPC file (for use in standard spectroscopic software), text file, or JPEG report
Battery	Removable and rechargeable lithium ion battery or 123a (e.g. SureFire™) batteries; >4 hours operation
External power supply	Wall plug transformer 100-240 VAC 50/60 Hz
Operating temperature	-4 °F to 104 °F (-20 °C to +40 °C)
Language configurations (optional)	English, Chinese, German, Russian, French, Japanese, Turkish. Also Arabic GUI with english library.
Onboard mixture analysis	Identification of up to 4 components in a mixture.

Complete MIL-STD-810G test results available upon request.



Designed for decon

Easily clean by submerging in decon solution, or using standard cleaning tools—no disassembly required.



Flexible sampling

The reversible sampling accessory provides environmental protection for volatile liquids and enables easy sampling of pills.



Variable pressure, safer response

The TruDefender FTX anvil allows the responder to adjust how much pressure is applied to a given substance.

Learn more at thermofisher.com/trudefender