



# Handheld FTIR for Chemical and Explosive Identification

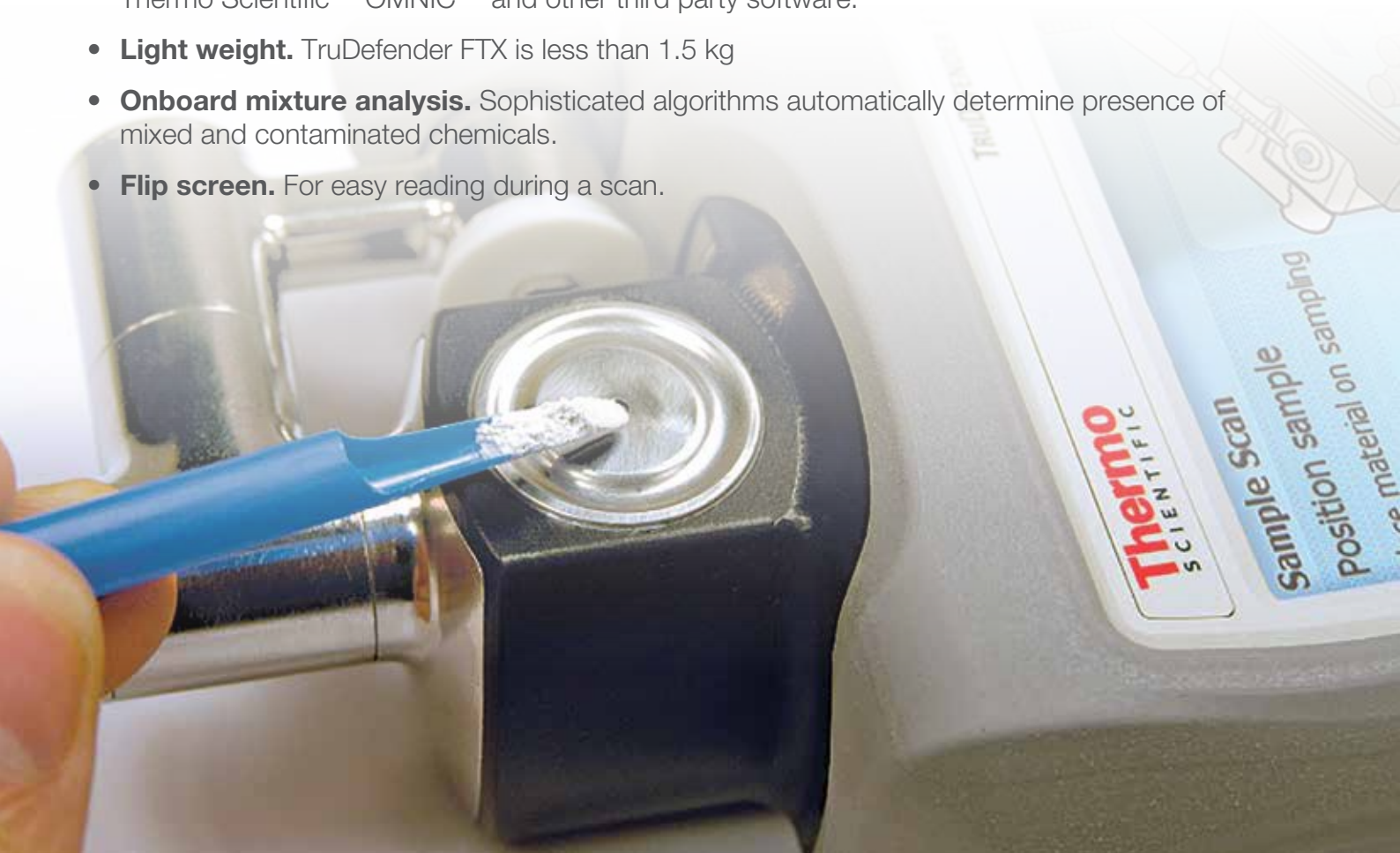
Thermo Scientific TruDefender FTX and FTXi

# 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.

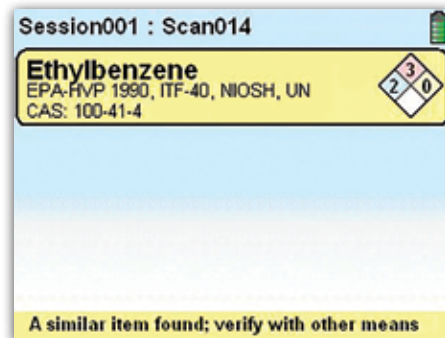
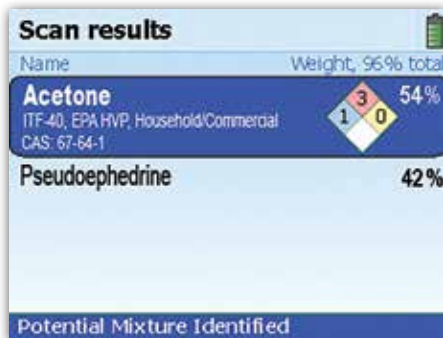
## Key Benefits:

- **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.



### FTXi Model additions

Embedded mobile phone technology. Send results via e-mail or SMS text directly from the hotzone. The TruDefender FTXi instrument adds to the core functionality by providing a direct link to incident command or reachback support through embedded mobile phone technology.

### Remote Connectivity - Rapid Action in the Field

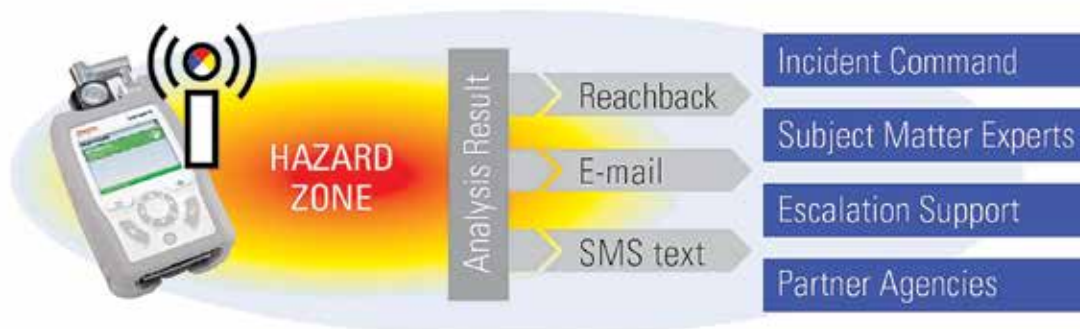
The TruDefender FTXi model integrates mobile technology into the instrument allowing you to respond to threats as quickly as possible

- Send results via email or SMS text direct from the hotzone
- Establish a direct link to incident command
- Reduce communications challenges and transcription errors



### Integrated Mobile Phone Technology

Users can send comprehensive analysis results, including chemical name, CAS number and spectra, directly from a hazard zone to incident command or Thermo Scientific reachback support. This wireless capability reduces communication challenges and transcription errors, ensuring the incident commander has the information needed to appropriately respond to a threat as quickly as possible.



Specifications	TruDefender FTX	TruDefender FTXi
<b>Weight</b>	3.12 lb (1.41kg)	3.6 lb (1.63kg)
<b>Size</b>	8.9 x 4.5 x 2.1 in (22.61 x 11.43 x 5.33cm)	8.9 x 4.5 x 2.39 in (22.61 x 11.43 x 6.07cm)
<b>Spectral Range</b>	4,000cm <sup>-1</sup> to 650cm <sup>-1</sup>	
<b>Spectral Resolution</b>	4cm <sup>-1</sup>	
<b>Collection Optics</b>	Solid Diamond Crystal ATR	
<b>Operating Frequency</b>	n/a	Quad band GSM - 850, 900, 1800, 1900MHz
<b>Survivability</b>	Independently tested for MIL-STD-810G and IP67 certification	
<b>Data Export Formats</b>	SPC file (for use in standard spectroscopic software), text file, or JPEG report	SPC file, text file or JPEG report; downloadable or send via SMS text, e-mail or direct to reachback
<b>Battery</b>	Removable and rechargeable lithium ion battery or 123a (e.g. SureFire™) batteries; >4 hours operation	
<b>External Power Supply</b>	Wall plug transformer 100-240 VAC 50/60 Hz	
<b>Operating Temperature</b>	-4 °F to 104 °F (-20 °C to +40 °C)	
<b>Language Configurations (Optional)</b>	English, Chinese, German, Russian, French, Japanese, Turkish. Also Arabic GUI with english library.	
<b>Onboard Mixture Analysis</b>	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.

