

# Integrated Raman and FTIR for Chemical and Explosives ID



The rugged, compact Thermo Scientific<sup>™</sup> Gemini<sup>™</sup> analyzer meets the demanding requirements of elite military forces and first responders, helping operators execute their mission quickly, safely, and confidently.

### Faster response

### Because every second counts.

### **Profiles**

By setting up Profiles, users can customize scan parameters based on situational awareness and their own knowledge and experience — before entering the hazard zone. This ensures the operator is ready to begin sampling as soon as they are downrange.



### **Flexible Input**

Operators can easily navigate features using either the tactile keypad or resistive touch screen, even when wearing protective gloves.

## Safer operation

### Designed with safety as a top priority.

In addition to Raman scan delay, adjustable laser power, and other built-in safety features, Gemini introduces the industry's first FTIR scan delay, enabled by the motorized anvil.







## Increased confidence with Thermo Scientific Gemini

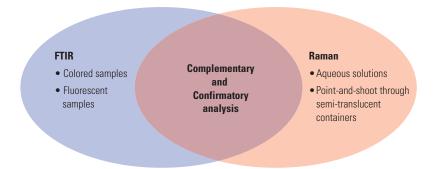
# niques.

### **Small Footprint, Big Capability**

The Gemini analyzer enables operators to quickly switch between analysis techniques. And, since they no longer need to sacrifice capability for weight, operators have robust analysis information quicker than ever before.

### **Dual Technologies: Complementary and Confirmatory**

Raman and FTIR are highly specific and reliable identification methods, each with strengths and limitations. By integrating both into a single analyzer, operators harness the power of each technology while enabling a broader range of chemical identification.

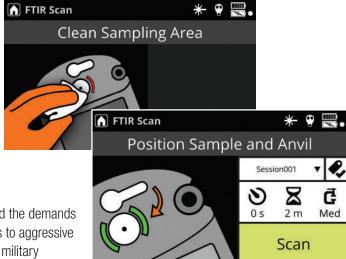


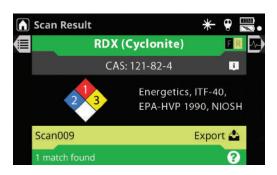
### **Intuitive Operation**

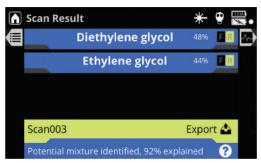
The intuitive, graphical interface ensures that minimal training is required for proficiency. For new users, the Scan Assist feature guides technology selection with a series of easy questions. The consistent interface and workflow across technologies ensure that experienced operators can easily proceed with sampling.

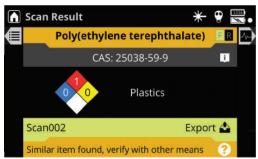
### **Designed for Survivability**

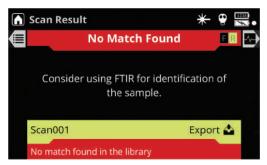
We understand the conditions operators face and the demands they place on equipment. From extreme climates to aggressive handling, Gemini has been certified to the latest military standards for ruggedness—drop, shock, vibration, temperature, immersion and much more.











### **Clear Results**

Built on the performance and reliability of the Thermo Scientific<sup>™</sup> FirstDefender<sup>™</sup> and TruDefender<sup>™</sup> product lines, Gemini analyzers deliver accurate, color-coded results which require no user interpretation and provide a quick overview of the hazard at hand. Based on these results, operators can quickly and confidently proceed with their mission.

### **Specifications**

Size	10.1 in x 5.7 in x 2.4 in (25.6 cm x 14.6 cm x 6.1 cm)	
Weight	4.2 lbs (1.9 kg)	
Spectral Range	FTIR: 4,000 cm <sup>-1</sup> to 650 cm <sup>-1</sup>	Raman: (785nm) 250 cm <sup>-1</sup> to 2875 cm <sup>-1</sup>
Spectral Resolution	FTIR: 4 cm <sup>-1</sup>	Raman: 7 to 10.5 cm <sup>-1</sup> (FWHM) across range
Collection Optics	FTIR: ATR diamond crystal, single bounce	Raman: Fiber optic probe
Operating Temp	-20°C to +50°C	
Power Supply	Internal 3.7V lithium polymer (QTY 1) battery pack Internal CR123A (QTY 3) batteries DC wall adapter, 12 V DC 1.25 A	
Data Export	SPC (for use in standard spectroscopic software), reachback (.rbk), text, or PDF	
Survivability	MIL-STD-810G and IP67	
Languages	English	

#### thermoscientific.com/PortableID

© 2015 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.



Americas Boston, USA +1 978 642 1132 Europe, Middle East, Africa Munich, Germany +49 89 3681 380 Asia Pacific New Territories, Hong Kong +852 2885 4613

www.thermoscientific.com/gemini sales.chemid@thermofisher.com

