



Chemical identification

Removing the uncertainty from chemical identification

Thermo Scientific 1064Defender Raman Analyzer

Definitive answers. Maximum flexibility.

The Thermo Scientific 1064Defender Raman Analyzer provides you with a flexible tool to meet your chemical identification needs. By offering user configurable scan profiles and expandable libraries, the 1064Defender Raman Analyzer tailors itself to the needs of the user while providing definitive results for confident and efficient decision making.

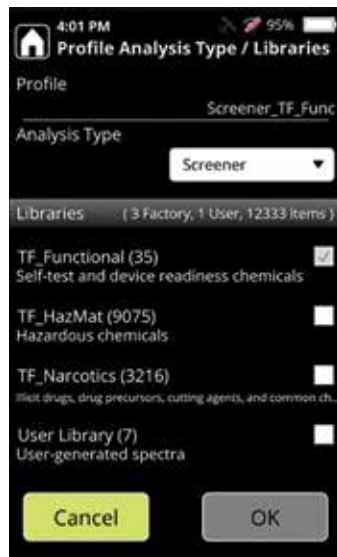
- **Ensure user safety with touchless, point and shoot scanning**

- Enhanced identification of fluorescent materials including narcotics, industrial chemicals and colored packaging thanks to its advanced 1064 nm optical engine
- Screener mode takes the guess work out of identifying substances by delivering results as either an alarm, warning, or clear to ensure users know what actions to take

- **User flexibility—through a customizable interface—ensures you and the instrument are always in sync**

- Large colorful touchscreen and raised illuminated keypad allows users to enter information how they like
- 2 different scan modes for advanced users – ID and Screener modes
- Modular and flexible – the device is future-proofed against the changing threat environment





- **Solid chain of custody**

- GPS and Digital Camera for time and location stamping
- Unique user ID and password – ensure your data is locked and safe
- User generated meta data
- Instrument logs – who scanned what substances and when

- **Expandable, comprehensive and user customizable libraries allow identification of controlled substances, cutting agents, precursors, and industrial chemicals**

- User customizable libraries allow for identification of targeted materials
- Regular updates to ensure you stay current with emerging threats

- **Built for the life you lead**

- Removable and rechargeable batteries
- Wi-Fi connectivity for data sharing
- WebUI allows for easy configuration
- Water tight – IP68 rated
- MIL-STD-810H rated

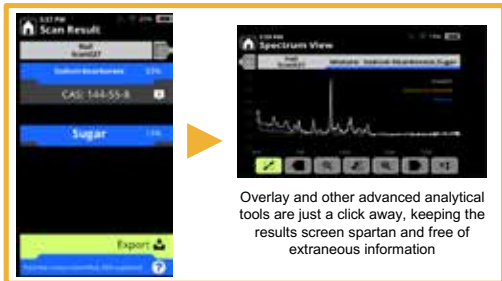
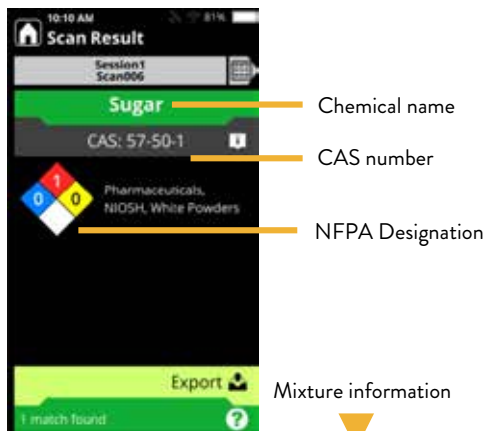


Clear and intuitive interface.

ID Mode

- Ideal for advanced users
- General characterization of chemicals
- Detailed investigatory functionality

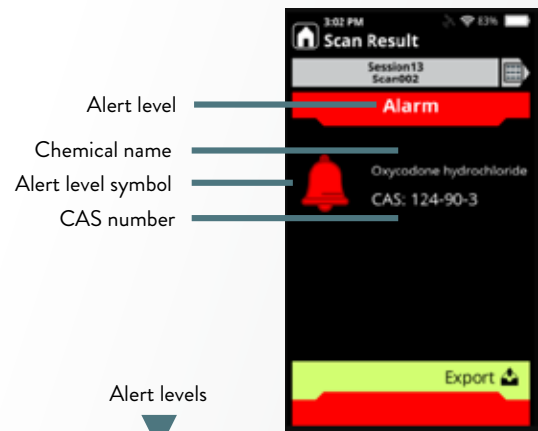
Detailed analysis of unknown chemicals



Screener Mode

- Ideal for all user levels
- Notifies users to presence of alert substance
- No interpretation needed to determine next steps

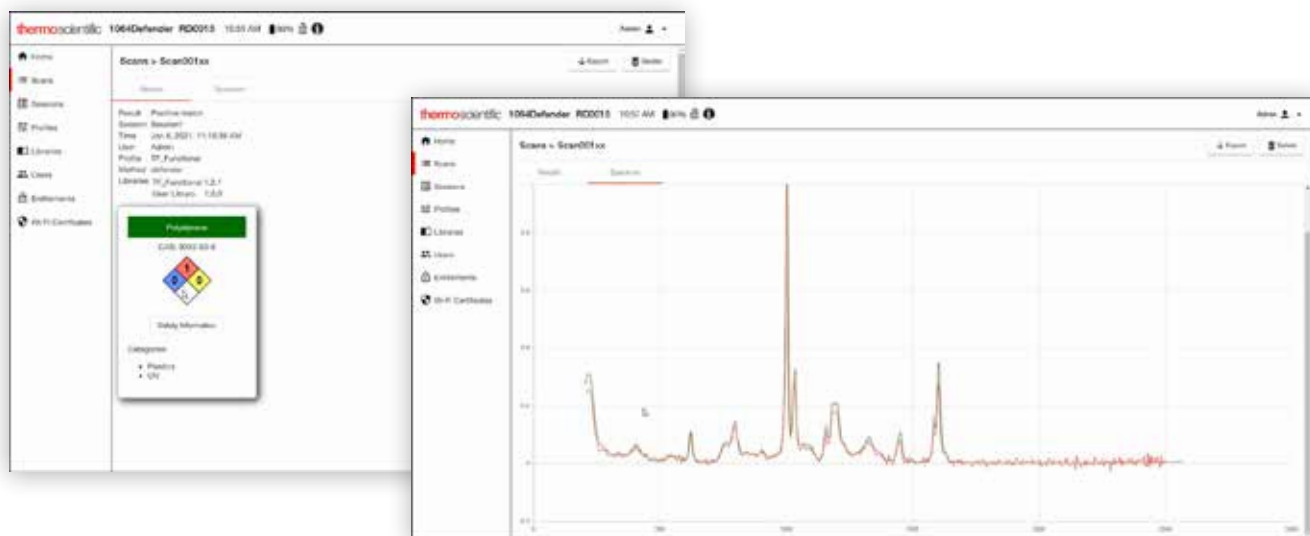
Monitor the presence of critical chemicals



Web Interface

Connect via Wi-Fi and USB to manage your instrument:

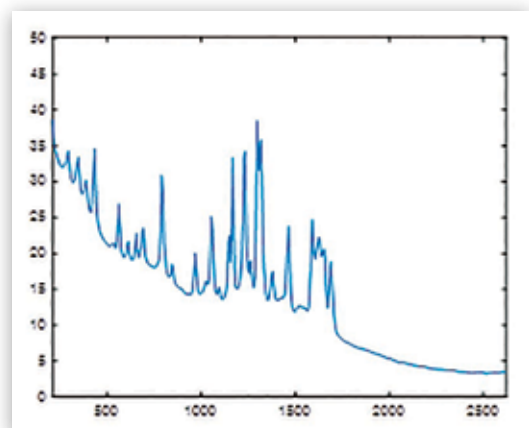
- Users
- Libraries
- Doesn't require download to a PC
- Settings
- Data
- Accessible through a PC browser



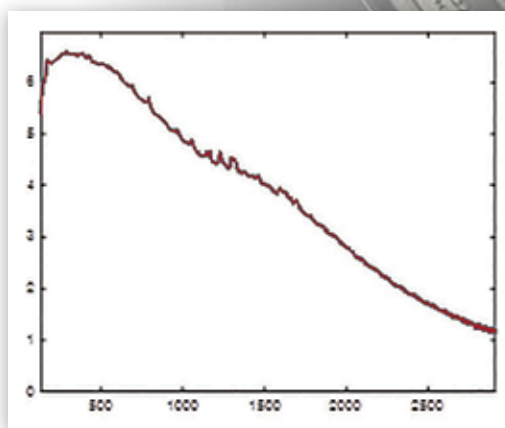
Touchless point and shoot scanning

1064Defender's strength is analyzing fluorescent substances. By suppressing background fluorescence, the 1064Defender analyzer enables point and shoot identification of common substances.

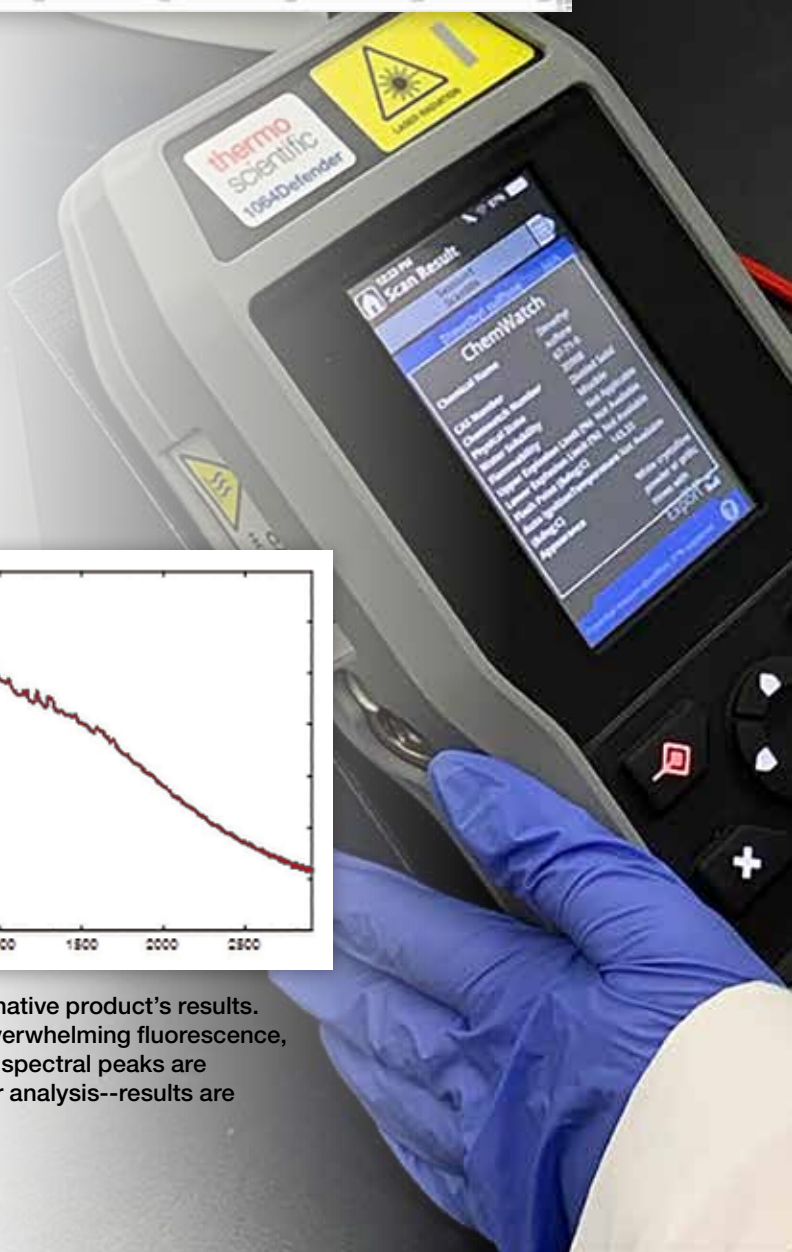
Clear spectral peaks are needed for identification of materials. In some substances the spectral fingerprint can be difficult to identify.



Above, 1064Defender's analysis of a controlled drug precursor. By subduing fluorescence, spectral peaks become visible, leading to the chemical's identification.



Above, an alternative product's results. Obscured by overwhelming fluorescence, the precursor's spectral peaks are not available for analysis--results are inconclusive.



Specifications 1064Defender Raman analyzer

Specifications	
Dimensions (HxWxD)	cm: 24.1 x 11.7 x 5.6 (in: 9.5 x 4.6 x 2.2)
Weight	1.6kg (3.5lb)
Laser (excitation wavelength)	1064.25 nm +/- 0.5 nm, 2 cm-1 linewidth
Laser output	Adjustable 480mW, 240mW, 96mW
Ocular hazard distance	160 cm 63 in
Ambient operating temperature	-20°C to 50°C
Connectivity	Wi-Fi, and USB-C cable
Battery	Removeable and rechargeable Lithium Ion 7.2V, 49Wh, 4-hr run-time at 25°C
Ruggedized	MIL-STD-810H IP68 rated

 Learn more at thermofisher.com/1064defender