

TurboFT -- Product Data Sheet

Fast Portable FT-IR Spectrometers

- ◆ Patented TurboFT™ interferometer.
- Portable plume detection.

We allow you to "Take It There".

Features

- Rapid scanning of 100 spectra/sec.
- Rugged high throughput interferometer
- Sensor weight <1 Kg
- Portable "lunchbox" computer
- Real-time output
- Instrument control software, including ratio and difference math functions, detection algorithm

Benefits

- Enables monitoring of rapidly changing targets or processes
- High speed scanning reduces influence of vibration
- Compact size reduces associated packaging / mounting costs and weight



Applications

- Chemical plume detection and identification
- Geological mapping
- On-line process monitoring
- Environmental monitoring and compliance



Specifications

Item	Parameter	Value	Units	Comments
1	Scan Rate	Up to 100	spectra/sec.	Standard @ 4cm ⁻¹
2	Detector	1	Pixel	Standard MCT
3	Spectral Range	7 - 15	micrometers	Standard;
				(3-15 available)
4	Spectral Resolution (FWHH)	4	Wavenumbers	Unapodized
			cm ⁻¹	
5	Size ¹ (WxDxH)	14x11.5x13	centimeters	(5.5"x4.5"x5")
6	Weight ¹	<1	Kilogram	(< 2.2 pounds)
1 No. 1/10:				

¹ Note 1/ Size and Weight shown based on interferometer only.

Standard Equipment

- Optical/Electronic module, including interferometer, LN2 cooled MCT detector and pre-amp
- Drive & sampling electronics
- Stand-alone "lunchbox" Pentium® computer with LCD screen
- Real-time processing and control software with ratio and difference
- 1" dia., 4.8° field-of-view (FOV) fore optics with through-the-lens viewing

Optional Equipment

- Special detectors, Stirling cooled detectors
- Thermoelectrically stabilized blackbody
- 2" or 4" telescope (thru-the-lens viewer)
- Pouring dewar (4 liter), tripod, source and drive electronics
- Customized packaging
- Portable computer with built-in battery charger for off-grid operation
- Our proprietary detection algorithm
- DLL for OEM and remote sensor control



(Photo courtesy of Sterling Computer)