

# Turbo FT™: Fast Portable Spectral Sensors

This compact field and industrial instrument is used for both ground based and airborne applications requiring high speed spectrometry, and utilizes our patented Turbo FT™ technology. Applications in remote sensing for geological mapping, airborne chemical agent detection, and online process control systems. Our rugged and compact design allows you to “Take It There”.



## Features

- Rapid Scanning of 25-100 spectra/sec
- Rugged high throughput interferometer
- Sensor weight < 4 kg
- Portable “lunchbox” computer
- Real-time output
- Instrument control software, including ratio and difference math functions

## 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

- High speed continuous remote sensing
- Ground Truth for geological mapping

- Environmental monitoring and compliance

## Specifications

Item	Parameter	Value	Units	Comments
1	Scan Rate	25 - 100	spectra/sec.	Standard
2	Detector	1	pixel	Standard MCT
3	Spectral Range	5 - 16	micrometers	Standard (2.5-16 available)
4	Spectral Resolution (FWHH)	4	cm <sup>-1</sup>	Standard
5	Size <sup>1</sup> (WxDxH)	20x20x15	centimeters	(8.0"x8.0"x6.0")
6	Weight <sup>1</sup>	<4	kilograms	(<9.0 pounds)

<sup>1</sup>Note 1 - Size and Weight shown based on Sensor only.

## Standard Equipment

- Optical/Electronic module, including interferometer, LN2 cooled MCT detector and pre-amp
- Drive & sampling electronics
- Stand-alone AC powered portable Windows™ computer with LCD screen
- Real-time processing software with ratio, difference, radiance, and emissivity
- 1"Ø, 4.8° field of view (FOV) fore optics with through-the-lens viewing

## Optional Equipment

- LN2 cooled two-color InSb/MCT detector for 2.5 to 16 micron operation
- Thermoelectrically stabilized blackbody
- 2" or 4" telescope
- Pouring Dewar (4 liter), tripod
- Portable computer with built-in battery and charger for standalone, off-grid operation



(Photo courtesy of Sterling Computer)