



## ***TurboFT -- Product Data Sheet***

### **Fast Portable FT-IR Spectrometers**

Patented TurboFT™ interferometer.

We allow you to “Take It There”.

#### **Features**

- Rapid scanning of 25-100 spectra/second.
- Rugged rotary high throughput FT interferometer
- Thermally stabilized interferometer
- Sensor weight <4 Kg
- Portable “lunchbox” computer
- Real-time on screen spectra, math processing, and file storage
- Instrument control software, including ratio and difference math functions, radiance, and emissivity

#### **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
- Maintains calibration in varying environmental conditions



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Please note that all specifications, design, and availability for sale may be changed at any time without notice.

## Specifications

| Item | Parameter                               | Value     | Units                           | Comments                        |
|------|---|-----------|---------------------------------|---------------------------------|
| 1    | Scan Rate                               | 25 to 100 | spectra/sec.                    | Standard @ 4cm <sup>-1</sup>    |
| 2    | Detector                                | 1         | Pixel                           | Standard MCT                    |
| 3    | Spectral Range                          | 5 - 16    | micrometers                     | Standard;<br>(2.5–16 available) |
| 4    | Spectral Resolution<br>(maximum) (FWHM) | 4         | Wavenumbers<br>cm <sup>-1</sup> | Unapodized                      |
| 5    | Size <sup>1</sup> (WxDxH)               | 20x20x15  | centimeters                     | (8.0"x 8.0"x 6.0")              |
| 6    | Weight <sup>1</sup>                     | < 4       | Kilogram                        | (< 9.0 pounds)                  |

<sup>1</sup> Note: Size and Weight shown based on sensor only. Computer and cables additional

### Standard Equipment

- Optical/Electronic module, including interferometer, LN2 cooled MCT detector and pre-amp
- Drive & sampling electronics
- Stand-alone AC powered Windows "lunchbox" style PC computer with 14-15 inch LCD screen
- Real-time TurboFT processing and control software
- 1" dia., 4.8° field-of-view (FOV) fore optics with through-the-lens viewing

### Optional Equipment

- 2.5-5 micrometer InSb detector
- Thermoelectrically stabilized blackbody
- 2" or 4" telescope (thru-the-lens viewer)
- Diffuse gold plate for down-welling radiance measurements
- Pouring Dewar (4 liter), tripod
- Portable computer with built-in batteries for off-grid operation



(Photo courtesy of Sterling Computer)