

Model 102 -- Product Data Sheet

Hand Portable FT-IR Spectrometer

Rugged remote sensing field and industrial instrument: Light weight, low power, highly portable, and completely standalone. Absolute calibrated radiance, temperature and emissivity field measurements.

Features

- Lightweight, Single Package Design
- Thermally Stabilized Interferometer
- Embedded PC Computer
- USB, Ethernet, and VGA ports
- Calibrated Output with Optional Thermally Stabilized Blackbody
- 'Through-the-Lens' Viewing of Targets
- High Sensitivity and Throughput
- Full Sun Readable LCD screen
- Real-Time On-Screen Spectra and Math Processing
- Runs On Compact Battery, cigarette lighter, or Worldwide Universal AC Supply

Benefits

- Compact and highly portable
- No need to carry added laptop
- Maintains calibration in varying environmental conditions





Specifications

Item	Parameter	Value	Units	Comments
1	Spectral Range	2 - 16	micrometers	3-5 and 8-14 micrometer atmospheric windows
2	Spectral Resolution (FWHM)	4	Wavenumbers (cm-1)	Unapodized, 1 sec. scan
3	Size (LxWxH)	36x20x23	centimeters	(14"x8"x9")
4	Weight	7	kilograms	(15 pounds)

Standard Equipment

- Optical/Electronic module, including temperature-controlled interferometer, drive & sampling electronics, embedded PC computer, WinFT™ processing software running under Windows™, USB, Ethernet, VGA, parallel, keyboard, and serial connections
- Liquid nitrogen (LN₂) cooled dual InSb/MCT detector and preamp (2-16 μm)
- 1" dia., 4.8° field-of-view fore-optics with through-the-lens viewing
- Worldwide AC supply and dual battery charger
- 12 volt, 9 A-hr battery pack (2)

Optional Equipment

- Thermoelectrically stabilized blackbody (1" or 2" diameter)
- 2"dia. / 2.4 degree or 4"dia. / 1.2 degree fore-optics for narrower fields of view
- Diffuse gold plate for down-welling radiance measurements
- Pouring Dewar (4 liter), tripod