

Model 102 Hand Portable FT-IR Spectrometer

This hand portable, remote sensing field and industrial instrument is lighter and more versatile than our Model 101, which has served the research needs of scientists and engineers worldwide since 1991.

Features

- Lightweight, Single Package Design
- Thermally Stabilized Interferometer
- Embedded Windows 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, 12 volt auto cigarette lighter, or worldwide universal AC supply/battery charger



Benefits

- Compact and highly portable
- No need to carry added laptop
- Ideal for emission and remote sensing
- Proven design with demonstrated reliability

Specifications

Item	Parameter	Value	Units	Comments
1	Spectral Range	2 - 16	micrometers	Standard IR
2	Spectral Resolution (FWHH)	4	wavenumbers	Standard, 1 sec. scan
3	Size (WxDxH)	36x20x23	centimeters	(14"x8"x9")
4	Weight	< 7	kilograms	(< 15 pounds)

Standard Equipment

- Optical/Electronic module, including interferometer, drive & sampling electronics, embedded Windows™ computer, WinFT™ processing software, USB, Ethernet, VGA, parallel and serial connections
- Liquid nitrogen (LN2) cooled dual InSb/MCT detector and preamp (2-16 μm)
- 1" θ , 4.8° field-of-view (FOV) 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" or 4" telescopes
- Diffuse gold plate for down-welling radiance measurements
- Pouring Dewar (4 liter), tripod