

 **QUAKELOGIC**

QL-SpectralIR Alpha

FT-IR SPECTROMETER SYSTEM



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- The **QL-SpectraIR Alpha FT-IR Spectrometer System** is a high-performance benchtop Fourier Transform Infrared (FT-IR) spectrometer designed for advanced STEM education, academic research, materials characterization, quality control, and routine laboratory analysis. Featuring a sealed optical system, high-sensitivity DTGS detector, integrated Diamond ATR sampling platform, powerful spectral library search capabilities, quantitative analysis tools, audit trail functionality, and intuitive Windows-based software, the system delivers exceptional analytical performance, reliability, and ease of use. The compact design minimizes maintenance requirements while providing rapid and accurate identification of solids, liquids, powders, films, polymers, pharmaceuticals, chemicals, and educational laboratory samples.

✓ Technical Specifications:



• Instrument Type:	• Benchtop Fourier Transform Infrared (FT-IR) Spectrometer
• Optical System:	• Fully Sealed, Moisture-Protected Optical Bench
• Interferometer:	• High-Stability Cube-Corner Michelson Interferometer

Technical Specifications:

- | | |
|--------------------------|--|
| • Spectral Range: | • 350 – 8,000 cm^{-1} |
| • Spectral Resolution: | • 0.85 cm^{-1} |
| • Wavenumber Accuracy: | • $\pm 0.01 \text{ cm}^{-1}$ |
| • Signal-to-Noise Ratio: | • $\geq 40,000:1$ |
| • Detector: | • High-Sensitivity DTGS (DLATGS) Detector |
| • IR Source: | • Long-Life, High-Intensity Air-Cooled Infrared Source |
| • Sampling Accessory: | • Integrated Diamond ATR Module |
| • Sample Types: | • Solids, Liquids, Powders, Films, Polymers, Pastes, and Gels |
| • Software Features: | • Spectral Library Search, Quantitative Analysis, Automated Reporting, Audit Trail, Electronic Signatures, and User Access Control |
| • Regulatory Support: | • FDA 21 CFR Part 11 Compatible |
| • Data Export: | • Standard Spectral Formats, PDF Reports, and CSV Files |



Technical Specifications:



- Operating System Compatibility:

- Windows 10 and Windows 11

- Communications:

- Ethernet and Wireless Connectivity

- Real-Time Instrument Diagnostics, Temperature Monitoring, and Humidity Monitoring

- Minimal Routine Maintenance; No Specialized Reagents Required

- Training:

- On-Site User Training Included

- Warranty:

- 10-Year Interferometer Warranty, 10-Year Laser Warranty, 5-Year IR Source Warranty, 10-Year Diamond ATR Crystal Warranty

Advanced FT-IR Spectroscopy & Laboratory Analysis Solutions

Corporate Headquarters

QUAKELOGIC INC.
2008 Opportunity Dr. Suite 130
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Available Monday - Friday, 9 AM -
5 PM PST

Executive Support Line

+1 (916) 899-0391

Direct support for FT-IR spectrometer operation, Diamond ATR sampling, spectral analysis, software workflow, user training, and laboratory maintenance applications.

Strategic Inquiries

sales@quakelogic.net

For FT-IR spectroscopy, materials characterization, quality control, academic research, STEM education, and routine laboratory analysis applications.

Our Commitment to Advanced FT-IR Spectroscopy Solutions

Precision Spectral Analysis

Delivering accurate and reliable FT-IR analysis, material identification, spectral measurement, and reporting performance for laboratory applications.

Advanced Analytical Performance

Providing sealed optics, high-sensitivity DTGS detection, Diamond ATR sampling, spectral library search, and smooth laboratory workflow.

Dedicated Laboratory Support

Ensuring reliable installation support, user training, application guidance, software assistance, warranty coverage, and after-sales service for FT-IR operation.

Scan to Explore FT-IR Spectroscopy & Laboratory Analysis Solutions



Explore QL-SpectralIR Alpha Capabilities and FT-IR Applications

Discover how QL-SpectralIR Alpha supports FT-IR spectroscopy, material identification, Diamond ATR sampling, quality control, academic research, and routine laboratory analysis applications.

www.quakelogic.net