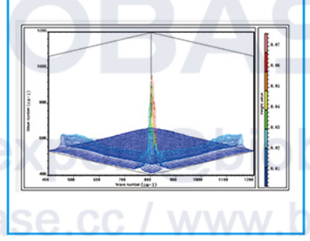
FT-IR Spectrometer





High similarity identification diagram



Two-dimensional infrared image



Intelligent electronic moisture-proof box

Introduction:

FT-IR spectrometer is an analytical instrument that uses an interferometer to modulate infrared light and obtains the infrared absorption spectrum of substances through Fourier transform. It is primarily used to identify chemical components of unknown substances(Such as organic compounds and polymer materials) and analyze molecular structures and chemical bonds. Widely applied in fields including chemistry, pharmaceuticals, materials science, environmental monitoring, and food safety.

Features:

* Built with an industrial-grade temperature and humidity module, it features a digital display for real-time readings and a humidity alarm to effectively prevent damage to core components from moisture.
* Reusable 304 stainless steel desiccant cartridge allows for easy replacement without opening the lid.
* Utilizes a modified Michelson interferometer with a non-orthogonal design, significantly improving energy efficiency.
* Employs a 3D orthogonal gold-coated mirror optical compensation system, ensuring permanent optical alignment without dynamic adjustment of the fixed mirror.
* The sliding sample compartment door minimizes interference from atmospheric water vapor and carbon dioxide during testing.
* Includes a standard spectral library of ~1,800 spectra. Additionally, a wide range of specialized infrared libraries(About 220,000 spectra) are available to support various industries. Users can also create custom libraries.
* Features a 24W SiC globar IR source with electronic voltage stabilization and digital power supply, ensuring extended service life.
* Offers multiple beam splitter options: KBr, ZnSe, CaF_2, all using reliable moisture-resistant materials.

Technical Parameters:

Model	BKFT-20
Detector	DLATGS
Spectral Range	7800~350cm^{-1}
Resolution	Better than 1cm^{-1}
Signal-to-noise Ratio	30000:1 (P-P value, 4cm^{-1}, 1min scan)
Wave Number Accuracy	Better than 0.01cm^{-1}
Transmission Accuracy	Better than 0.05 τ%
Beam Splitter	KBr substrate with germanium coating(Imported)
Interferometer	Non-orthogonal Michelson interferometer
Data Transmission Interface	High-speed USB2.0(Compatible with USB3.0)
Compatible Operating System	Windows XP, Windows Vista, Windows7, 8, 10, 11
Environment Conditions	Temperature: 15~30℃ Humidity: 15~60%
Consumption	12V24W
Standard Accessory	Operating software; sample holder; spare desiccant
Optional Accessory	FDA 21 CFR Part 11 compliance software; ZnSe crystal ATR; press; sheet mold; agate mortar; KBr spectral purity; gas pool; detachable liquid tank; fixed liquid pool; intelligent electronic moisture-proof box Among them, the electronic moisture-proof box is mandatory optional attachment
Power Supply	AC 100~240V, 50/60Hz
Sample Bin Size	190*160mm
External Size(W*D*H)	450*350*210mm
Package Size(W*D*H)	750*630*590mm(Main unit + electronic moisture-proof box)
Net Weight	14kg
Gross Weight	60kg(Main unit + electronic moisture-proof box)

BIOBASE
E-mail: export@biobase.com
www.biobase.cc / www.biobase.com