

FT-IR SPECTROMETER VS-FT-08



Our new FT mid-IR spectrometer VS-FT-08 has been designed basing on our extensive R&D and expertise in the IR spectroscopy (infrared spectroscopy). This multipurpose and easy-to-operate instrument provides a well suited option for various analytical laboratories. The high-quality misalignment-proof optics, high-sensitivity DLATGS detector, and a wide variety of accessories ensure the users' absolute confidence in the high accuracy of the measurement data and make it an ideal tool for routine measurements at low inventory investment and running costs.

Measurement procedure

The instrument is operated by software run under Windows® environment, which provides simple control and allows even unskilled personnel to easily master the instrument operation.

All major functions, such as peak identification, derivative quantification, quantitative calibrations creation, etc., can easily be performed with software. Library search module allows to plug spectra libraries and to create own user's libraries.

PRINCIPLE OF OPERATION

Is based on the measuring IR spectra using Fourier transform technique.

FEATURES AND BENEFITS

Patented high-quality misalignment-proof (permanently aligned) Double Cat's Eye interferometer

- Hermetically completely sealed optical compartment with the automated moisture monitoring system. Gold Coated mirrors with ZnSe window for complete protection from humidity.
- High-sensitivity Temperature Controlled DLATGS detector
- Advanced Ceramic source with extended life
- Built-in smart total self-diagnostics system
- Innovative ergonomic design of the spectrometer housing that provides best convenience for the operator
- Large sample compartment 260 X 270 X 180mm (W X D X H)

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- Wide variety of accessories, includes ZnSe, Diamond and Ge Crystal ATR units, Temperature Controlled Diamond ATR, Flow Through Attachment, Liquid Cell, GasCell, Magnetic Film Holder and other compatible accessories

APPLICATION EXAMPLES

Chemical industry
Pharmaceutical industry

Forensic investigations
Oil and gas industry

EQUIPMENT AND OPTIONS

- VS-FT-08 FT mid-IR spectrometer;
- Window Based software package with all advance features.
- Set of measuring cells, accessories and spectra libraries (on Customer request).

SPECIFICATIONS

Spectral range	6000-500 cm ⁻¹ with ZnSe Beam Splitter
Wavenumber Precision	0.0001 cm ⁻¹
Variable resolution	64, 32, 16, 8, 4, 2, 1, 0.5 cm ⁻¹
RMS signal-to-noise ratio	> 55000: 1 peak to peak (4 cm ⁻¹ , 1 min)
Stability of the 100% line, %	0.1
Scanning speed	30 scan/sec at 16 cm ⁻¹ resolution
Detector	High resolution DLATGS and option for LN ₂ cooled MCT Detector
Beamsplitter	Humidity Resistant ZnSe Beamsplitter sealed and desiccated housing
Wavenumber accuracy	±0.01 cm ⁻¹
Interferometer	Vibration- and misalignment-proof patented Double Cat's Eye Interferometer, all mirrors Gold Coated
Radiation source	High-intensity long-life stabilized ceramic IR radiation source
Hypernated Technology	Possibility to connect with TGA, GC, GC-MS, Microscope etc.
Operating Condition	Temperature Range up to 35°C and Relative Humidity up to 75%
Weight	32 kg
Size	600 X 580 X 400 mm