

High-performance FTIR Analyser for Mid-IR measurements



**Innovative Design**

- Rugged Construction
- Double Pivot Michelson Interferometer (patent pending)
- Small Footprint (0.1 m<sup>2</sup> ; 1.3 ft<sup>2</sup>)
- Compatible with Most FTIR accessories
- Designed for No Scheduled Maintenance

**Intuitive Software**

- Easy to Use
- Efficient Data Acquisition, Processing and Analysis
- Extensive Built-In Health Monitoring

## SPECTROSCOPIC PERFORMANCE (typical, at 25 Celsius with DTGS detector)

■ Spectral Range (1% amplitude)	480 to 10,050 cm <sup>-1</sup>
■ Linear Scan Velocity	8 steps from 0.2 to 2 cm per second
■ Best Un-apodized Resolution	0.5 cm <sup>-1</sup>
■ Apodized Resolution (from 0.2 to 1 cm/s)	1 to 64 cm <sup>-1</sup> , in steps of 2x
■ Apodized Resolution (at 2 cm/s)	4 to 64 cm <sup>-1</sup> , in steps of 2x
■ Signal to Noise (60s, 16 cm <sup>-1</sup> , at peak response)	50,000: 1
■ Short-term Stability	< 0.1 %
■ Temperature Stability	< 1 % per degree Celsius
■ Frequency Repeatability (@ 1918 cm <sup>-1</sup> )	< 0.001 cm <sup>-1</sup>
■ Frequency Accuracy (@ 1918 cm <sup>-1</sup> )	< 0.04 cm <sup>-1</sup>

## APPLICATION SOFTWARE (Computer not included)

■ Standard Software (included)	HORIZON MB™ FTIR Software
■ Optional Software	HORIZON MB™ QA Software
■ Operating System Compatibility	Win XP Pro
■ Optional Modules	Pro pack, Library, Quantify, Scripting, Pharma

## OPTICAL BENCH

■ Beamsplitter Material	ZnSe (all non-hygroscopic optics)
■ Interferometer Mechanism (patent pending)	High-throughput double pivot Michelson, fully jacketed
■ Purgeability	Enclosure, detector head & sample compartment
■ Source (with electronic stabilization)	Ceramic, 10-year expected half-life
■ Laser	Solid-state, designed for no scheduled maintenance
■ Detector Module	DTGS
■ Sample Compartment Configuration	Open (Arid-Zone), center focus
■ Sample Compartment Dimensions	20 x 14 cm plate, 8.7 cm beam height
■ Sample Compartment Mounting	3-point pin-in-place mount

## DATA COMMUNICATIONS

■ Hardware Port	Ethernet, 10/100 Mbps
■ Connection	Direct-connect or LAN
■ Sampling	24-bit data into 32-bit words

## INSTRUMENT ENCLOSURE

■ Material	Rugged, all-metal frame with integral handles
■ LED Indicators	Power, Status, Data
■ Size	435 W x 280 D x 372 H mm
■ Weight	24 kg
■ Stability	Vibration isolated damper feet
■ Instrument Purge	Single Swagelock 1/4" male quick-connect
■ Power Connector	Low-voltage input connector with lock

## ENVIRONMENTAL

■ Included High-performance Power Block	120-240 VAC, 50/60 Hz
■ Power Consumption	65 W
■ Operating Temperature	10 to 35 Celsius
■ Operating Relative Humidity	5 to 80 % , non-condensing
■ Regulatory	CSA, RoHS, CE

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