



## 311-PLASTICS

with horizontal one bounce ZnSe or diamond ATR accessory and pressure applicator

<b>Specifications</b>	
<b>Wavelength range, ZnSe</b>	<b>5000 to 600 cm-1</b>
<b>Wavelength range, diamond</b>	<b>5000 to 600 cm-1</b>
<b>Resolution</b>	<b>2 cm-1</b>
<b>Interferometer</b>	<b>Pendulum type with roof mirrors</b>

<b>Beamsplitter, standard</b>	<b>Multicoated KBr</b>
<b>Beamsplitter, option</b>	<b>Multicoated ZnSe</b>
<b>Frequency reference laser</b>	<b>VCSEL</b>
<b>IR source</b>	<b>Ceramic</b>
<b>Sample chamber</b>	<b>Open architecture type</b>
<b>Desiccant possibility</b>	<b>Yes</b>
<b>Interface</b>	<b>USB</b>
<b>Data acquisition system</b>	<b>24 bit</b>
<b>Power</b>	<b>12 VDC (110-240 VAC), 20W</b>
<b>Dimensions, spectrometer</b>	<b>W22xD21xH19 cm</b>
<b>Dimensions, sampling unit</b>	<b>W8xD8xH5(16) cm</b>
<b>Footprint</b>	<b>21×22 cm</b>
<b>Weight</b>	<b>10 kg</b>
<b>Temp. environment</b>	<b>15 – 28 °C</b>
<b>Humidity environment</b>	<b>Best below 65%</b>

## General

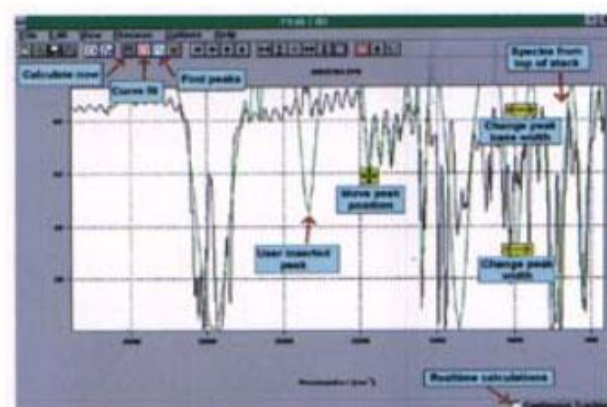
**311-PLASTICS** FTIR spectrometer provides high performance in a compact size and at an affordable price. Combining flexible sample handling outside the instrument and leading Interspec for Windows software, the 311-PLASTICS FTIR spectrometer is a great solution for industrial, government or academic labs.

It implements the same field-proven FTIR technology found on other Interspec FTIR models using pendulum type roof mirror interferometer. The lightweight design and small footprint of the 311-PLASTICS FTIR spectrometer enables you to bring the spectrometer where you need answers most: from your busy laboratory to the production floor or in the warehouse.

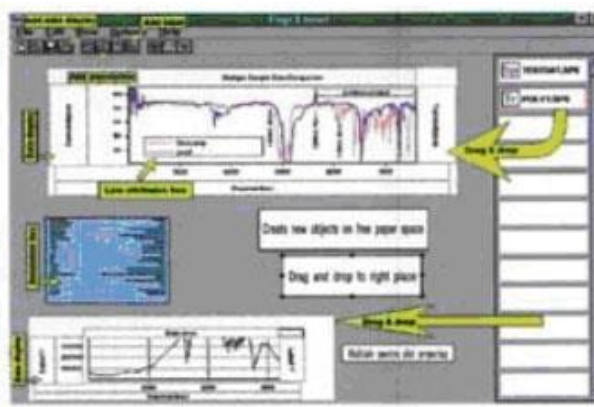
With the wavenumber range from 5000 to 600  $\text{cm}^{-1}$  (either KBr or ZnSe optics) and spectral resolution of 2  $\text{cm}^{-1}$ , the spectrometer forms an open architecture type sample compartment outside the spectrometer capable to use different accessories.

## Software

Interspec for Windows is supplied on CD and provided with each system shipped. The software includes features for all standard analytical requirements including manipulation of spectral data, instrument control, plot with preview on the screen plus many others. Also included are several facilities for analytical modelling of interferograms or spectra, with smoothing, and baseline correction, interactive editing and data manipulation. Also spectral subtraction, mixture subtraction, smoothing derivatives, plot with preview etc. Data import and export is possible in ASCII, Excel, SPC or JCAMP formats. Other FTIR spectroscopic softwares like Essential FTIR for running the spectrometer and for complete handling of measured infrared data are available as an option.



Peak editing feature



Window page layout

**FDM SearchFaster™ provides easy access to the FDM ALL ATR Bundle**

- User interface optimized for ease-of-use
- Easy to search and browse
- 8 search algorithms
- Easy PDF reports
- Reads Interspectrum FTIR files (\*.spe).

## ATR/FTIR Library

### 1) FDM ALL ATR Bundle (12 databases, 6,943 spectra)

#### Includes:

FDM ATR Polymers Diamond	FDM ATR Polymers Germanium
FDM ATR Inorganics Diamond	FDM ATR Inorganics Germanium
FDM ATR Organics Diamond	FDM ATR Organics Germanium
FDM ATR Dyes Diamond	FDM ATR Dyes Germanium
FDM ATR Cosmetics	FDM ATR Drugs
FDM ATR Retail Adhesives	FDM ATR Essential Oils

### 2) FDM ATR Plastics Kit Upgrade ( ~ 85,000 spectra)

#### ATR spectra key advantages:

- Reproducible path lengths
- Cleaner baselines
- Better searching results
- Diamond and Germanium libraries provide complementary perspectives.
- Germanium spectra are transmission-like. They tame the effects of strong refractive index values.

## Models:

311-PLASTICS : Standard 311-PLASTICS ( with KBr optics).

311-PLASTICS : Non-hygroscopic 311- PLASTICS ( with ZnSe optics).