

MicromATR Vision™

See What You Sample - Fast and Easy



Features of the MicromATR Vision™

- Highest throughput, cost effective diamond ATR accessory
- Fully integrated sample viewing and image capture
- Versatile macro and micro ATR sampling
- Complete mid-IR and far-IR spectral range
- Kinematic ATR sampling plates – optimal position every time
- Compatible with a broad range of ATR crystal plates
- Compact optical design fits your FT-IR

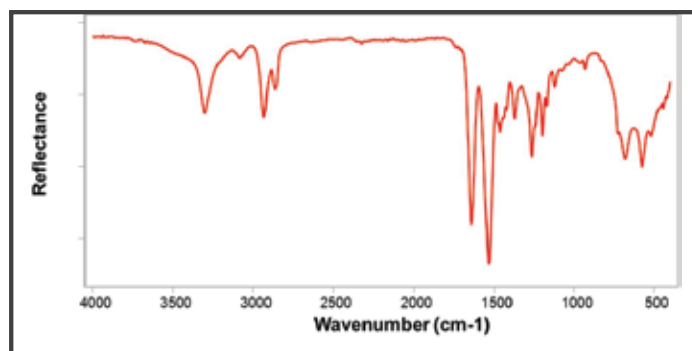
The MicromATR Vision™ is an all new product designed to provide the highest available optical throughput in a monolithic diamond ATR accessory.

The small diameter of the crystal broadens the sample range from macro to microsampling. Integrated viewing optics with illumination of the sample through the diamond ATR crystal enables selection of discreet sample features and provides visual proof of sample contact.



Image capture of single fiber showing the fiber positioned and intimate contact on the ATR crystal.

ATR sampling with the MicromATR Vision is fast and easy. Elegantly smooth operation of the pressure clamp delivers high and even pressure onto the sample ensuring high quality ATR spectra from even the most difficult samples.



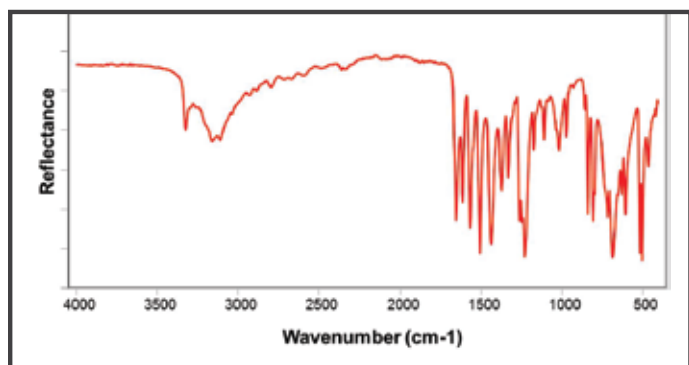
ATR spectrum of Nylon 6,6 fiber collected using a 20 second scan time and 4 cm-1 spectral resolution.

The recommended crystal plate for most applications is diamond - providing a durable, scratch proof sampling surface. The Diamond XR plate provides full mid-IR and far-IR spectral range and sample view through the crystal. The Diamond HT (high throughput) version provides maximum IR signal and highest signal-to-noise ratio (SNR) for the most difficult samples.

Optional crystal plates for the MicromATR Vision include germanium (Ge) for high refractive index samples, Diamond 3X (3 reflection) and Diamond 9X (9 reflection) crystal plates (limited pressure) for low concentration components. Crystal plates are kinematic and easily exchangeable with no alignment, tools or screws required. The MicromATR Vision is also compatible with crystal plates from some other manufacturers.



Video micrograph of drug active ingredient recorded on MicromATR Vision



ATR IR Spectrum of acetaminophen, the active ingredient in numerous over-the-counter analgesic drugs

Applications

- Drug characterization
- Forensic Science
- Fiber analysis
- Contaminant identification
- Surface defect characterization

Specifications

ATR Crystal Plates	Diamond XR (to 10 cm-1)
	Diamond HT (to 500 cm-1)
	Ge (to 600 cm-1)
	Diamond 3X (to 650 cm-1)
	Diamond 9X (to 650 cm-1)
Sample Viewing	Fully integrated video
	Digital video and image capture (Requires Diamond XR or HT crystal plate)
Video Power and Output	USB 2.0
Crystal Plate Mount	Kinematic, magnetically fixed
ATR Crystal Dimensions	2.5 mm diameter (Diamond XR and HT)
	4.3 mm (Diamond 3X)
	6 mm (Diamond 9X)
Crystal Plate material	Stainless steel
Angle of Incidence	45 degrees, nominal
Focus Optics	Reflective
Pressure Clamp	Handle-Lock, adjustable
	Torque Knob
Maximum Pressure	30,000 psi (Diamond XR and HT versions)
Purge enclosure	Smallest purge volume
Dimensions	Purge / Seal tubes included
	4.5 X 3.5 X 3.5 inches
	114 X90 X 90 mm
FT-IR Compatibility	Most (please inquire)



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