

DATA SHEET

Thermo Scientific ConservatIR FTIR External Reflection Accessory

Convenient flexibility to measure large samples

Easily perform qualitative spectral analysis on large objects using the Thermo Scientific™ ConservatIR™ FTIR External Reflection Accessory. Investigate paints, pigments, and other component materials of art objects using the accessory with a Thermo Scientific™ FTIR Spectrometer. Verify the authenticity of art objects before they go to auction or confirm the materials needed for restoration and conservation. Designed for art conservators, this accessory can also analyze a variety of large objects such as automotive parts, toys, and fixtures.

ConservatIR FTIR external reflection accessory offers:

- **Easy positioning** – opto-mechanical arm measures samples oriented in front, below or above the spectrometer sample compartment
- **Precise visual orientation** – accessory arm contains an integrated camera that provides a magnified view and image capture of the sampled spot
- **Multiple measurement modes** – analyze small or large samples with a specular/diffuse reflection sampling head or use an optional diamond ATR sampling head

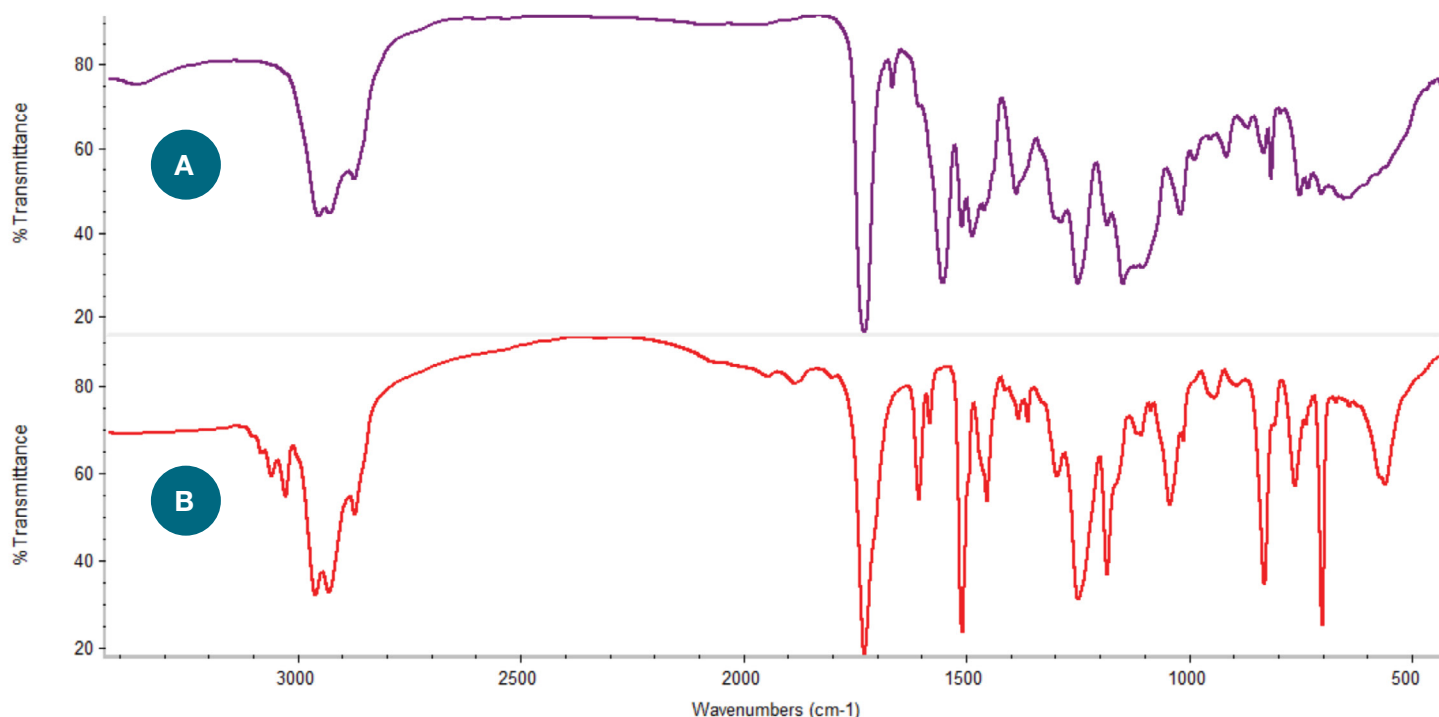
ConservatIR FTIR External Reflection Accessory Specifications

Detector Type	Uses detector on board the Nicolet FTIR spectrometers
Dimensions (mm)	533 (H) x 622 (W) x 653 (D)
Voltage	100 - 240 VAC 47-63 Hz 3.2 A
Certifications/Compliance	CE; ETL; Manufactured in an ISO 9001:2000 certified facility
For use with	Thermo Scientific™ Nicolet™ iS5 and Nicolet iS10 Spectrometers
ATR Crystal (optional)	Diamond
Reflection Mode Spot Size	~1.25 mm in diameter
ATR Mode Spot Size	~0.5 mm in diameter



ConservatIR accessory in various positions of the Nicolet iS5 FTIR sample compartment.

%Transmittance spectrum in less than 30 seconds: Coating on aluminum soda can



A shows spectrum taken from the outer coating of the soda can, which includes design pigments.

B shows spectrum of inner coating of soda can used to protect soda from aluminum can.

ConservatIR Accessory Features

- Fixed 45° incident angle
- Sampling head configurable for diffuse and specular reflection
- Optional diamond ATR sampling head available
- Allows both contact and non-contact analysis, depending on the sample
- Enables analysis outside the sample compartment
- Articulated opto-mechanical system with 100° of tilt
- Small sampling spot size:
 - 500 µm diameter for ATR
 - 1250 µm diameter for specular and diffuse reflection
- Small spot size allows analysis with high spatial resolution
- Spectral range: Mid-IR, depending on spectrometer optics
- Video imaging system:
 - Magnifies the image for easy viewing
 - Directly views the sample surface
- Integrates with your computer for real-time viewing and long-term storage of sampled images

Catalog Number	Description
869-188700	ConservatIR FTIR External Reflection Accessory for Nicolet iS5 FTIR spectrometer
869-188800	ConservatIR FTIR External Reflection Accessory for Nicolet iS10 FTIR spectrometer
869-188900	ConservatIR Optional ATR Sampling Head

Find out more at thermofisher.com/conservatir

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