DIALPATH ACCESSORY
FOR THE AGILENT CARY 630 FTIR

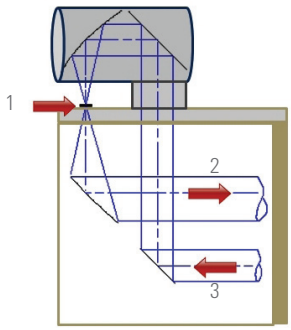
The Measure of Confidence

Change the way you analyze liquid samples forever

Imagine never having to use an infrared (IR) transmission cell again. Have you ever wanted to measure liquid samples with the ease of using an ATR, be able to vary pathlengths from 30 –1000 µm, and obtain accurate, quantitative results in seconds? Now you can. Agilent's unique DialPath technology will change the way you analyze liquid samples forever.

The Agilent DialPath accessory for the Cary 630 FTIR facilitates FTIR transmission measurements of liquids, without the inconvenience of cumbersome IR cells — no spacers, windows, or syringes are needed. The DialPath accessory provides superior sensitivity, accuracy and repeatability, is easy-to-use, and is controlled by the Cary 630 MicroLab pictorial software interface designed to get users up and running in minutes.

Available in three preset pathlengths, the DialPath enables you to measure multiple peaks of varying intensity on the same sample in a single analysis — offering the versatility to handle both qualitative library matching and quantitative analysis on a wide range of concentrations and peak intensities. Put simply, the DialPath will save you time, provide higher quality data, and eliminate any potential for sample-prep errors that can lead to poor results.



Optical diagram of the Cary 630 DiaPath accessory

1. Sample position
2. Outgoing IR light
3. Incoming IR light

For more information:
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Features

Innovative — unique to Agilent, the DialPath offers three, factory preset pathlengths to measure transmission of liquid samples and polymer thin films in the MidIR region.

- Pathlength options
  - 30, 50, 100 µm (± 0.25 µm repeatability)
  - 50, 100, 200 µm (± 0.25 µm repeatability)
  - Custom pathlengths up to 1000 µm
- Sample types
  - Liquids
  - Polymer films (< 50 µm thick)
- Wavelength range
  - Mid IR region from 5,100–600 cm^{-1}

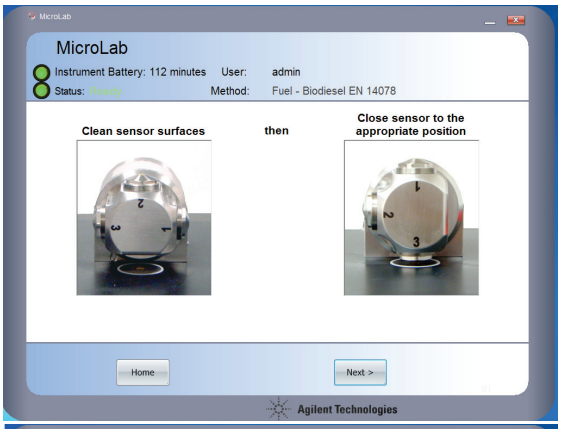
Reliable — designed originally for out-of-lab use in Agilent mobile FTIR products, the Cary 630 FTIR is the most rugged FTIR on the market today. Using ZnSe windows that are optimized for superior energy throughput, the DialPath can be used in the most humid and tropical of environments, providing answers you can trust, day-in/day-out.

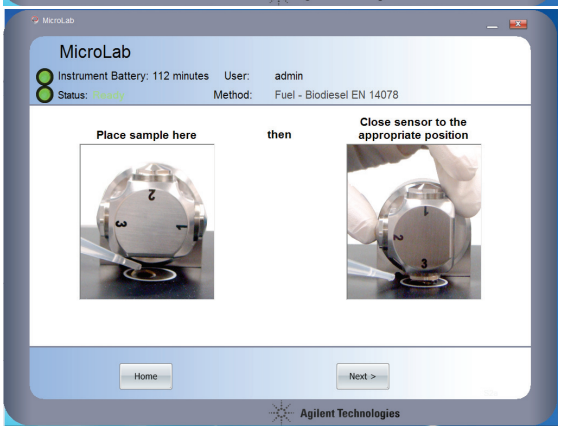
Intuitive software — multi-language software guides users through every step of operation, while color coding alerts make it easy to see whether samples meet specification. The software also provides a feedback mechanism to advise when the accessory requires cleaning, ensuring you get the right answers everytime.

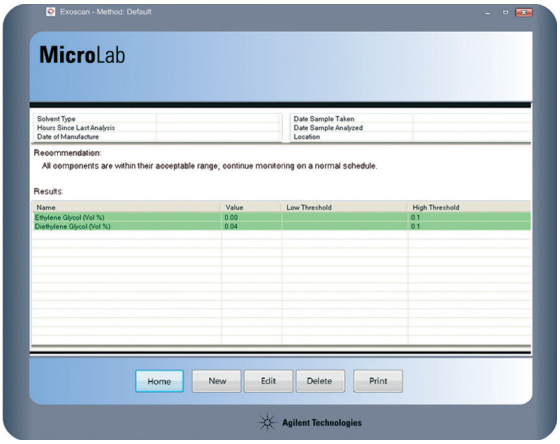
Flexible — Simply rotate the DialPath to select from three different preset pathlengths. Select a longer pathlength window set for lower concentration samples, or use a shorter pathlength for more concentrated samples. Because the alignment is preset at the factory, no other adjustment is required.

Compact — takes up only 9 x 10 cm of bench space, and weighs just 1.4 kg (3 lb).

Step-by-step instructions guide users, making operation and interpreting the results easy and reliable







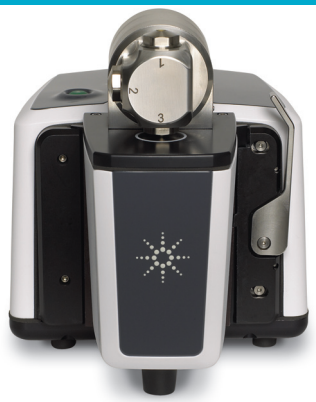
Using the DialPath to measure thin polymer films eliminates the need to mount samples on a card. This allows you to see exactly where in the sample you are measuring as well as eliminating fringe patterns on the film.

How can the DialPath help me?

If you measure liquid samples, especially at different pathlengths, you are most likely using a conventional transmission IR cell or ATR. Assembling conventional cells and transferring liquid samples to them can be cumbersome, time consuming, and frustrating if air bubbles get into your sample or blockages or leaks occur and you have to start again. By comparison, the DialPath is simple, fast and error-free — making analysis as easy as 1-2-3. No more assembly of IR cells, no more blockages or air-bubbles and instant access to up to three pathlengths — if your sample is too dilute or concentrated, just turn the DialPath mechanism to choose the most appropriate pathlength and measure your sample. It really is that simple.

Three steps to analysis with the DialPath

1 Ensure the crystal is clean



2 Place your sample on the window

3 Turn the DialPath to your required pathlength to analyze

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