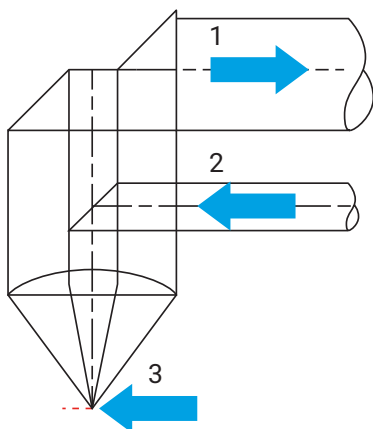




Diffuse Reflectance Accessory for the Agilent Cary 630 FTIR

Measuring powder samples has never
been easier



Optical diagram of the Cary 630 FTIR DRA

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

The Agilent Diffuse Reflectance Accessory (DRA) for the Agilent Cary 630 FTIR provides quantitative and qualitative information on powdered or solid samples. This technique delivers more sensitive quantitative analysis than ATR, while still being easy to use. Diffuse reflectance is a traditional technique used in FTIR to obtain high quality and sensitivity in powdered samples. The DRA is optimized for use with the Cary 630 FTIR optical system, providing the highest sensitivity available for fast, accurate measurements. While ATR is often the easiest sampling technique, the sensitivity can be difficult to adjust. Diffuse reflectance allows you to vary the ratio of KBr to the sample to measure a much larger range of concentrations. Powdered samples are mixed and diluted in KBr powder to the required concentration before loading the sample into the sample holder. The multiposition sample plate includes a diffuse gold reference standard and an optional diffuse polystyrene disk.

Features

Innovative – the Agilent DRA for the Cary 630 FTIR snaps in and out in seconds, with no alignment required.

Measurement type

- Normal incidence, diffuse reflectance

Sample tray

- Gold and polystyrene reflectance standards
- Three sample cups
- 10 mm sample cup size

Wavelength range

- 5,100 to 600 cm^{-1} with ZnSe windows

For more information, visit:

www.agilent.com/chem/cary630

Intuitive software — multilanguage software guides users through every step of operation, while color coding alerts make it easy to see whether samples meet specification. Includes the versatility to handle both qualitative library matching and quantitative analysis. The software also provides a feedback mechanism to advise when the accessory requires cleaning, ensuring you get the right answers every time.

Easy-to-use — the DRA uses a four-position sample holder (Figure 1), which slides into a slot on the right side of the accessory. The first position of the holder contains a diffuse reflectance gold mirror, which is used for background collection. The other three positions are used for filling with KBr/sample mixtures. Detents in the holder allow you to gauge which position is being measured.

Reliable — field proven, rugged optomechanical system offers outstanding performance and reproducibility, even in humid and tropical environments, providing answers you can trust, day-in and day-out.

Compact — takes up only 4.8 × 7.4 cm of bench space, and weighs just 0.6 kg (1.3 lb).

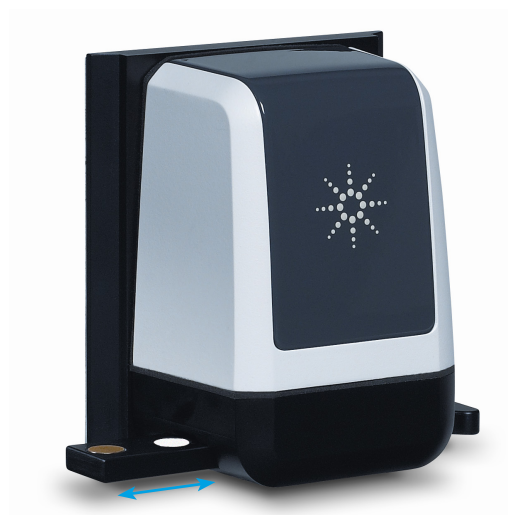


Figure 1. Simply slide the four-position holder to the desired sample position for measurement.

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