

# TRANSMISSION MODULE FOR THE AGILENT CARY 630 FTIR

The Measure of Confidence

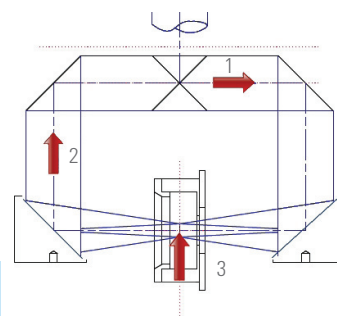


Fast, easy measurements of solids, liquids and gases

The Agilent transmission module for the Agilent Cary 630 FTIR provides the classic FTIR sample interface enabling the measurement of solids, liquids or gases. Solids are typically analyzed in a pressed KBr pellet, a nujol mull, or evaporation onto salt plates; liquids are measured with a traditional sealed or demountable cell and gases can be measured with the Cary 630 FTIR gas cell. The purgeable transmission module is also useful for measuring thin polymer films. In each case, proper sample preparation is required, in order to obtain an acceptable measurement.



Transmission module with gas cell



### Optical diagram of the Cary transmission module

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

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## Features

**Innovative** — the transmission module for the Cary 630 FTIR snaps in and out in seconds, with no alignment required, allowing you to mount and measure a wide range of samples in the MidIR wavelength range:

- KBr 6,300-350  $\text{cm}^{-1}$
- ZnSe 5,100-600  $\text{cm}^{-1}$

And, unlike other more conventional FTIR instruments, when you do not need the sample compartment you simply remove it — saving valuable bench space and allowing the addition of other sampling accessories, such as an ATR, that give much better performance due to its direct coupling with the Cary 630 FTIR engine.

**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. 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 everytime.

**Versatile** — interchangeable sampling accessories for all your analysis needs. The transmission module has a card slide mount holder, which is compatible with industry standard sized holders and can also accept standard KBr pellets, liquid, and gas cells.

**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. The Cary 630 FTIR with transmission module can be used in the most humid and tropical of environments, providing answers you can trust, day-in/day-out.

**Cost effective** — the interchangeable cells reduce operating costs; buy only what you need now, and update as your needs change.

**Compact** — takes up only 18 x 14 cm of bench space, and weighs just 1.9 kg (4.25 lb).

## Additional accessories

Depending on the application you will need either a salt plate, gas or liquid cell.

### Salt plates

Salt plates are most commonly used as the sample support for unknown liquid materials, whereas KBr pellets are used to dilute and support solid materials into the infrared beam.

### Gas cells

The Cary 630 FTIR's 50 mm pathlength gas cell is designed to be used with the transmission module and provides gas phase transmission measurements. The gas cell's stainless steel body and KBr windows make it suitable for the analysis of a variety of samples across a broad spectral range.

### Liquid cells

Transmission analysis can also be used for quantitative analysis using sealed cells or demountable cells with constant pathlengths. The transmission module is specifically designed to accept industry standard sized cells that can be obtained directly from Agilent. However, available only from Agilent, are the DialPath and TumbIR liquid sampling accessories that replace traditional transmission IR liquid cells.

For more information:  
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© Agilent Technologies, Inc. 2013  
Published in USA, April 1, 2013  
5991-2201EN

