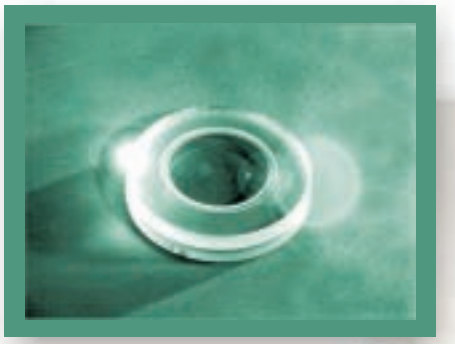
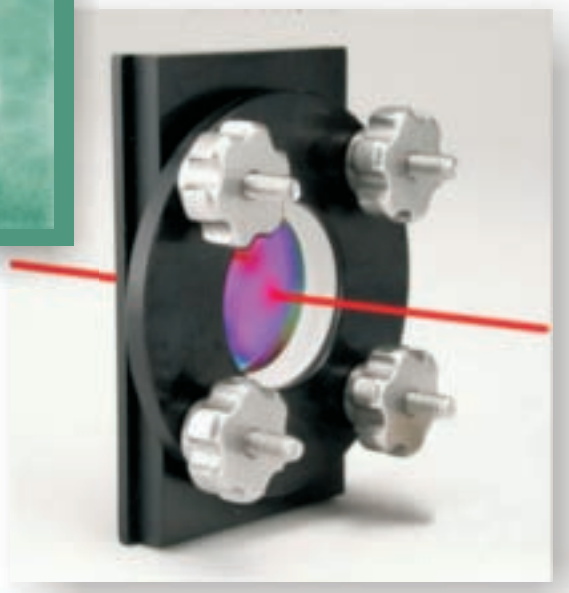
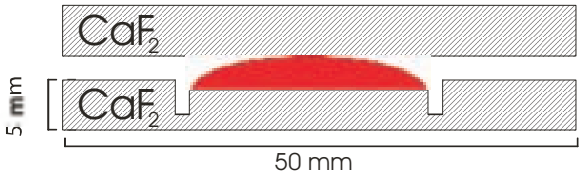
BioCell™

CaF_2 cells for IR/CD spetroscopy







The CaF_2 cell for IR/UV-CD spectroscopy is created between a perfectly flat, optically clear plate and another plate, the center of which is deepened to form a recessed parallel surface surrounded by a groove. This groove serves as a barrier between the sample area and the outer seal, keeping the sample from readily coming into contact with the sealing area. The seal is created by the "upper" flat plate pressing onto the outer ring of the "lower"plate.

The cells are very easily assembled and disassembled, filled with solution, and washed between measurements. The seal of the cell prevents the evaporation of water for about 24 h at room temperature in the desiccated area of the FT-IR spectrometer. The reproducibility of the cell path length after assembly / disassembly is 0.1 m

Features

- Specifically designed for FT-IR & CD/VCD spectroscopy of biological molecules
- Useable spectral range 67,000 - 1,000cm^{-1}
- Ideal for aqueous solutions
- Uses small micro-liter volumes
- Large optical aperture
- Wide range of path lengths: ~2 to 7, ~10, ~20 , ~40 , ~80 and ~120 m
- 5 mm thickness x 50 mm diameter standard size. Cells with 4 mm x 40 mm dimensions are available
- Matched pairs of cells for sample and reference may be requested
- Two choices of temperature controllers

BioTools

'Tools for Discoveries of Life'

Temperature Control Options

TempCon™

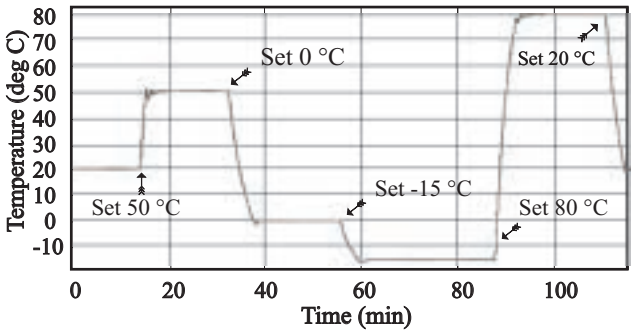
Pelltier based temperature controller

TempCon™ temperature controller unit is designed for use in FT-IR spectrometers with two types of windows: large circular BioCell™ windows and rectangular windows. The controller can be controlled either manually or through computer interface.

The Ramp-Soak Control Interface allows for temperature studies that can be aligned with FT-IR scanning software and can be used in applications such as effect of temperature on protein conformation.

Features

- Typical temperature range: -20.00 °C to +80.00 °C
- Temperature range achievable with other coolants -50.00 °C to +100.00 °C
- Variable temperature ramp programmable from 0 to 9995 °C / hour
- Soak time programmable from 0 to 144 0 minutes
- Accepts both BioCell™ and long-rectangle type windows
- Custom made holders can be ordered for non-typical window designs



BioJack™

Jacketed cell holder

BioJack™ liquid cooling and heating jacket is designed for use with the BioCell™ windows for use in FT-IR spectrometers.

Features

- Aluminum construction
- Threaded for tight seals
- High quality, low cost option for temperature control

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