



Hollow Fiber Gas Cell Blocks



Laser spectroscopy just got even easier

Gas cell blocks include an optical window, a fiber port, and a gas port. With two blocks you can convert a hollow fiber into a bench top gas cell for absorption spectroscopy or wavelength reference applications. Simply swap fibers for different path lengths.

Key Features

- Incredibly simple and robust alignment
- Range of wavelengths: UV to LWIR
- Range of pathlengths: 0.1 to 5m
- Low sample volume: < 10 mL
- Compact size; flexible layout

Components

- Wedged optical windows (range of materials)
- SMA or FC fiber port
- Swagelok style or barbed gas fittings
- Holes and set screws for 30 mm cage systems
- Mounting holes for optical bench or housing



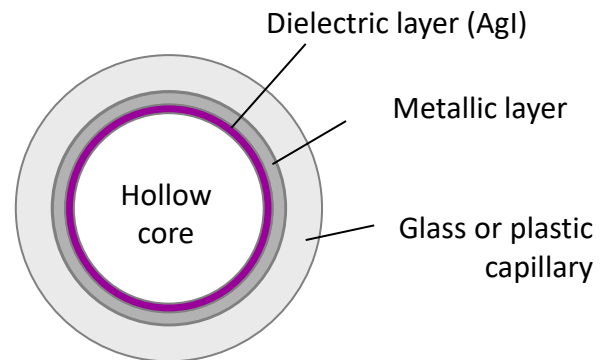
Hollow Fiber Gas Cell Kit

Standard Kit = 2x Gas Blocks + 1 Hollow Fiber

Non-optical parts	Stainless steel
Fiber coating options	Aluminum (UV) Silver (VNIR) Silver-Iodide (Mid-IR)

Variations

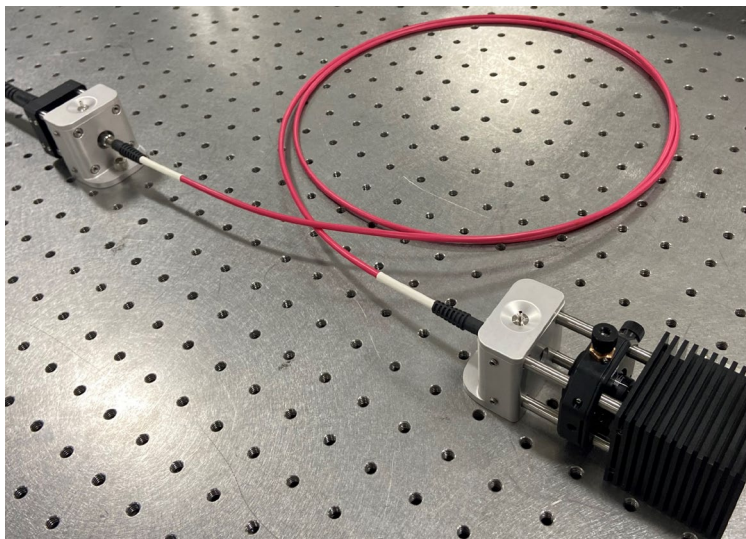
Internal Bore Diameter	200 - 1500 μm
Path Length	0.1 – 5.0 m
Sample Volume	0.01 - 9 mL
Standard fiber wavelength ranges (other options available on request)	UV: 0.1 – 0.45 μm VNIR: 0.4 – 1.1 μm NIRSW: 1.5 – 5 μm MWIR: 3 – 12 μm MWLWIR: 5 – 14 μm LWIR: 8 – 16 μm
A range of window options available including wedged and/or AR coated	Silica: 0.35 - 0.7 μm BaF2: 0.2 - 11 μm ZnSe: 2 - 13 μm



Hollow core fiber cross-section

Alignment

The relatively large fiber diameter (ID = 0.2 - 1.5 mm) and single pass configuration enables obtaining “first light” with minimal effort. In some cases, you can collimate your beam and mount your laser on one end and simply put your detector at the other end. It is that easy.



Versatile Systems

Gas cells kits can utilize a wide range of Guiding’s hollow core fiber optic waveguides. Options include different sample volumes, path lengths, and wavelength ranges.

Contact Us

Email: sales@guidingphotonics.com

Web: <https://guidingphotonics.com>

We are a spin-off from Opto-Knowledge Systems, Inc.

