

INFRA·SOLID[®]

Highest accuracy · Highest selectivity

Gas Filter Cell

for best optical measurement of gases



Key features

- ✓ Elimination of cross-sensitivities to interfering gases in optical gas analysis.
- ✓ Adjustment of measuring instruments and gas analyzers.
- ✓ Soldered, high-quality CaF₂ window. Leakage tested!
- ✓ Filling tube enables self-filling with desired gas and sealing.
- ✓ Broad range of applications from UV to far infrared spectral range.

Hermetic gas filter cells are gas-filled cylinders and are used to block out specific frequency bands of interfering gases in optical gas analysis.

Additionally, the cells can be filled with reference gases of certain gas concentrations to be used for calibration of gas analysis systems, e.g. adjusting laser wavelengths to specific gas absorption bands.

For a very high long-term stability our gold-plated gas filter cells are hermetically sealed. The high transmissivity is achieved by soldered CaF₂ windows.

Applications in gas analysis



ENVIRONMENTAL
MONITORING



H₂O
VAPOR FILTER



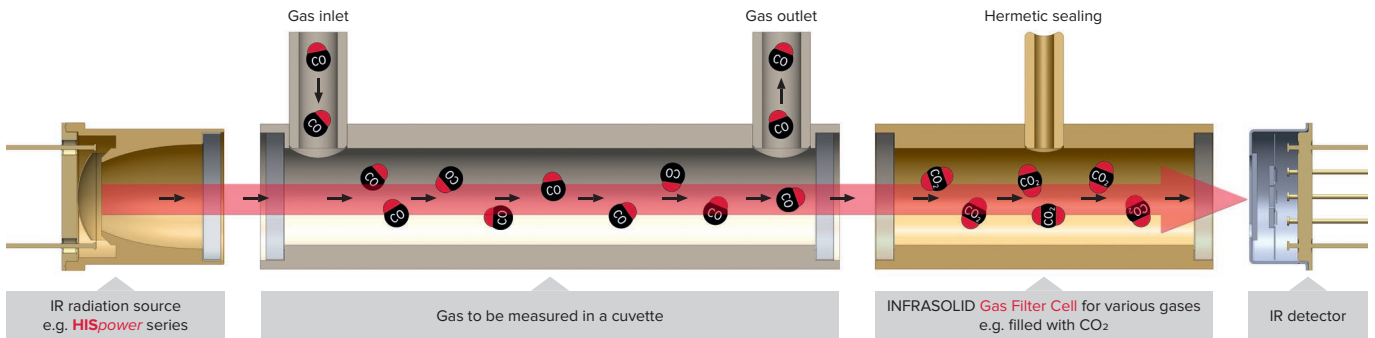
MEDICAL
GAS ANALYSIS



SYSTEM
CALIBRATION

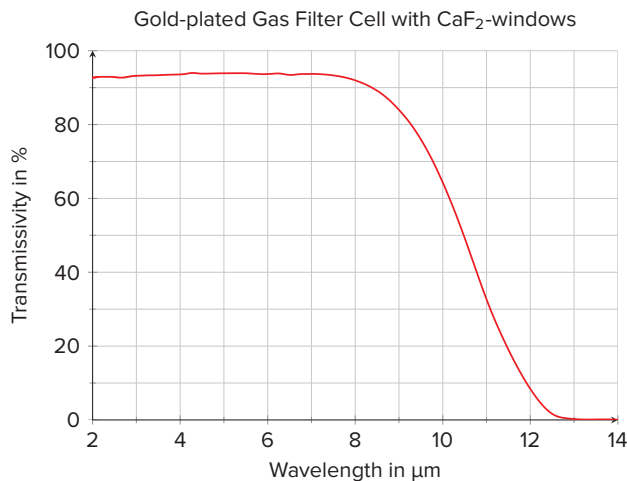
Example application

NDIR gas measurement with gas filter cell for elimination of cross sensitivities and highest selectivity

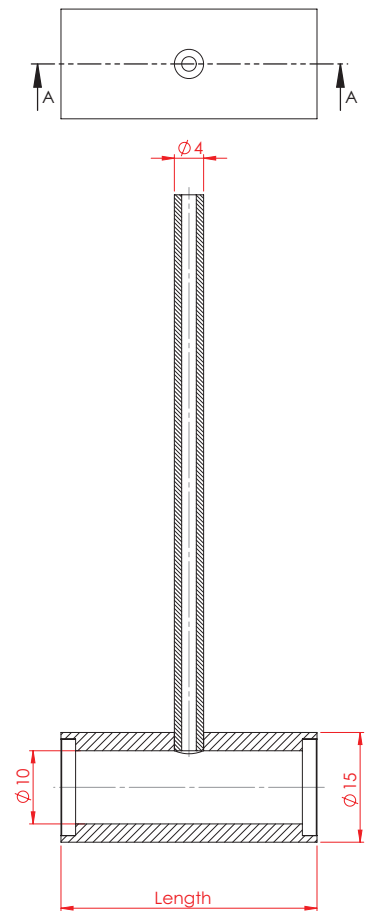


Data sheet

Optical specifications



Technical drawing



Main specifications

| Parameter | GFC-12 | GFC-35 | GFC-100 |
|-------------------|-------------------------------|-------------------------------|-------------------------------|
| Length* | 12 mm | 35 mm | 100 mm |
| Temperature range | -25...+85 °C | -25...+85 °C | -25...+85 °C |
| Window | 2 x soldered CaF ₂ | 2 x soldered CaF ₂ | 2 x soldered CaF ₂ |
| Material | Gold plated brass | Gold plated brass | Gold plated brass |
| Transmissivity | 85% up to 8 μm | 85% up to 8 μm | 85% up to 8 μm |

* Other lengths on request.

Are you looking for IR emitters, detailed technical specifications or would you like to have an individual development? Visit our website and feel free to contact us!

www.infrasolid.com

INFRA·SOLID[®]

Infrasolid GmbH · Gostritzer Str. 61 · 01217 Dresden · Germany
 Phone: +49 (0) 351 / 8547 8030 · E-Mail: info@infrasolid.com
www.infrasolid.com