

# INFRA·SOLID<sup>®</sup>

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  $\text{CaF}_2$  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  $\text{CaF}_2$  windows.

## Applications in gas analysis



ENVIRONMENTAL  
MONITORING



$\text{H}_2\text{O}$   
VAPOR FILTER



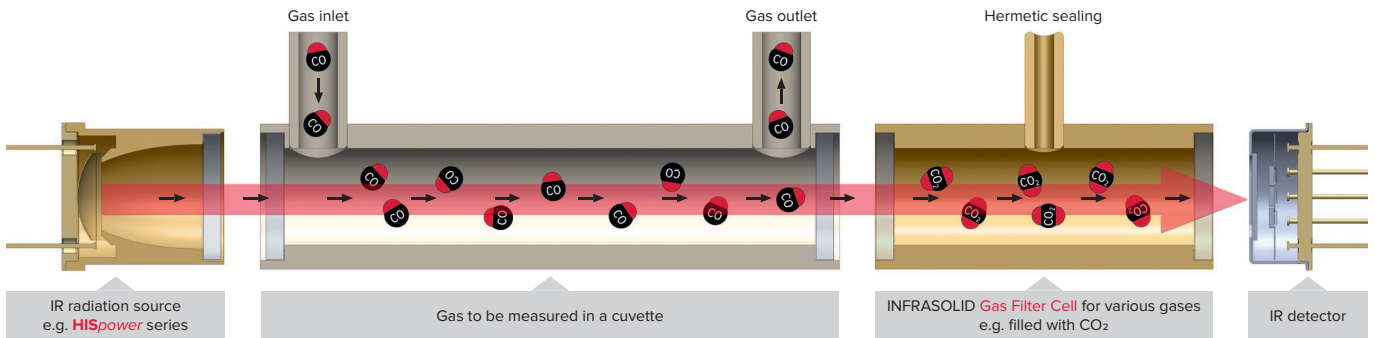
MEDICAL  
GAS ANALYSIS



SYSTEM  
CALIBRATION

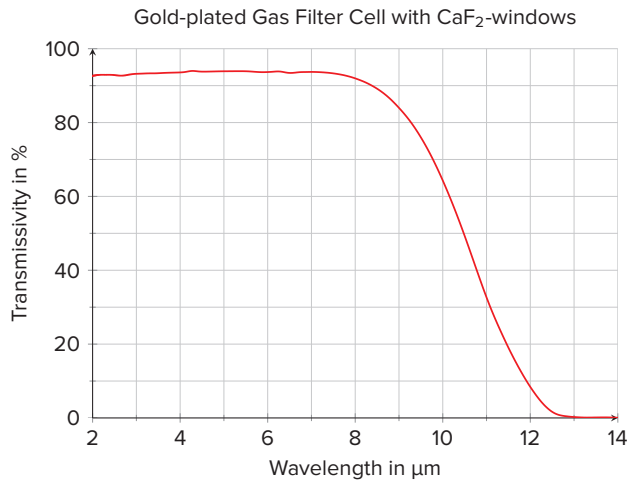
# Example application

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

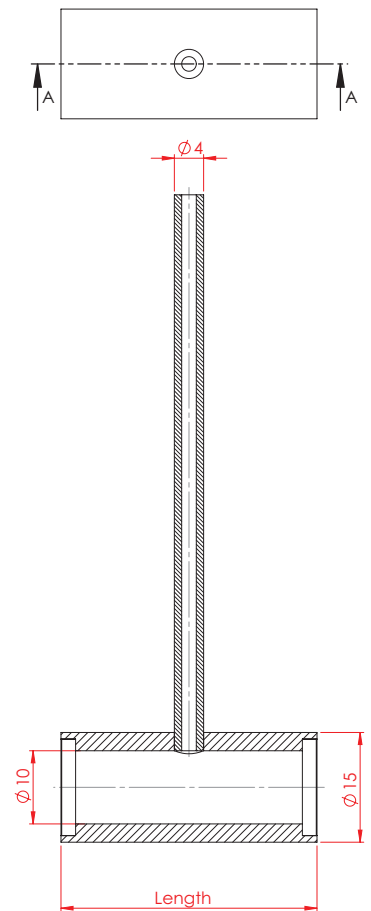


## Data sheet

### 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 <sub>2</sub>	2 x soldered CaF <sub>2</sub>	2 x soldered CaF <sub>2</sub>
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](http://www.infrasolid.com)

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