

# In-Line Flow Cells

For in-line absorbance or fluorescence measurements, Avantes offers the in-line flow cells. They are available for tubing diameters of 1/4, 1/2 and 1 inch. The flow cells consist of Swagelok union cross tube fittings and two UV/VIS/NIR collimating lenses.

The optical path depends on the size of the flow cell: the 1/4" version has an optical path of 5 mm, the 1/2" of 10 mm and the 1" version 20 mm. They feature SMA-905 connectors for easy coupling to any of our wide range of fiber-optic cables or bundles

All flow cells come with variable focusing to optimize light throughput over the spectral range.

All flow cells are also available in high temperature configurations (up to 200°C). Special flow cells for gasses and liquids are also available and are designed to withstand pressures up to 100 bar.



## Technical Data

	1/4" flow cell	1/2" flow cell	1" flow cell
<b>Optical path</b>	5 mm	10 mm	20 mm
<b>Sample volume</b>	62 µl	124 µl	248 µl
<b>Wavelength range</b>	200-2500 nm		
<b>Fiber connection</b>	2 x SMA-905 connectors		
<b>Collimating optics</b>	Plano Convex, focal length 8.7 mm		
<b>Max. Temperature</b>	80°C (HT version till 200°C available on request)		
<b>Max. Pressure</b>	10 bar (Special Gasflowcell up to 100 bar)		
<b>Material</b>	Stainless steel for the fitting, black anodized aluminum for the SMA-905 connectors		
<b>Overall dimensions</b>	55 x 45 x 15 mm	72 x 50 x 22 mm	98 x 60 x 38 mm

## Ordering Information

<b>Flowcell-1/4"</b>	• Flow cell 1/4" with variable SMA adapter, 5 mm path length, incl. 2 UV/VIS/NIR lenses
<b>Flowcell-1/2"</b>	• Flow cell 1/2" with variable SMA adapter, 10 mm path length, incl. 2 UV/VIS/NIR lenses
<b>Flowcell-1"</b>	• Flow cell 1" with variable SMA adapter, 20 mm path length, incl. 2 UV/VIS/NIR lenses
<b>Flowcell-1/4"-FL</b>	• Fluorescence Flow cell 1/4" with 2 SMA adapters, incl. 1 UV/VIS/NIR lens
<b>Flowcell-1/4"-5-HPHT</b>	• Flow cell for gasses and liquids, 1/4", 5 mm optical path length with SMA adapter, including 2 UV/VIS/NIR lenses, high pressure 100 bar, high temp 200°C.
<b>Flowcell-1/4"-50-HPHT</b>	• Flow cell for gasses and liquids, 1/4", 50 mm optical path length with SMA adapter, including 2 UV/VIS/NIR lenses, high pressure 100 bar, high temp 200°C.

## Option

- HT** • High temperatures up to 200°C