SELL SHEET

LWCC-5000 Series

Fiber Optic Liquid Waveguide Capillary Flow Cells for High UV/VIS/NIR Absorbance and Turbidity Applications

The LWCC-5000 series liquid waveguide capillary flow cells are new fiber optic flow cells with a larger inner diameter of 1 mm. High UV/VIS/NIR absorbance and turbidity applications are possible with this new flow cell, based on WPI's established liquid core waveguide technology. The result is an enhancement of sensitivity and improved limits of detection when compared with conventional spectroscopic sampling techniques. Wetted parts in the sample cell light path are PEEK, fused silica and Teflon. Optical fibers are used to transport light to and from the sample cell.

FEATURES

- Flowcell for absorbance and turbidity
- Wide choice of pathlengths
- UV, VIS and NIR
- SMA 905 fiber coupled
- Continuous flow and discrete sampling

BENEFITS

- Larger inner diameter improves baseline stability of aqueous samples
- WPI´s patented waveguide technology enhances sensitivity and improves limits of detection
- Versatile sampling accessory used in spectrophotometry for low detection limits
- Connects directly to a Peristaltic pump, WPI's sample Injector assembly (# 58006), and the LWCC Start-up Kit (#KITLWCC)

APPLICATIONS

- DNA, RNA & protein quantification
- Flow injection analysis
- Colorimetric nutrient and trace metal analysis
- Drug discovery
- Process control
- Preparative HPLC analysis

Model	Optical Pathlength	Internal Volume	Transmission @254nm	Transmission @500nm	Noise [mAU]	Maximum Pressure	Type
LWCC-5005	5 cm	40 µl	≥ 22%	≥ 22%	≤ 0.1	75 psi	2
LWCC-5010	10 cm	80 µl	≥ 20%	≥ 20%	≤ 0.1		
LWCC-5025	25 cm	200 µl	≥ 12%	≥ 12%	≤ 0.2		
LWCC-5005HP	5 cm	40 µl	≥ 20%	≥ 20%	≤ 0.1	220 psi	
LWCC-5010HP	10 cm	80 µl	≥ 18%	≥ 18%	≤ 0.1		
LWCC-5025HP	25 cm	200 µl	≥ 10%	≥ 10%	≤ 0.2		
LWCC-5050AF	50 cm	400 µl	≥ 10%	≥ 12%	≤ 0.2	75 psi	1
LWCC-5100AF	100 cm	800 µl	≥ 7%	≥ 10%	≤ 0.2		
LWCC-5200AF	200 cm	1600 µl	≥ 5%	≥ 7,5%	≤ 0.5		

SPECIFICATIONS

Wetted Materials	Type 1: Peek, PTFE Type 2: Peek, PTFE, Fused Silica
Inner Diameter	1 mm
Liquid Ports	Standard 10-32 Coned Port Fitting
Fiber Connection	600 µm SMA
Transmission Reference	Two 600 µm fibers, butt-coupled
WPI U.S. Patents	5,444,807; 5,570,447; 5,604,587; 6,603,556; 6,385,380

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