

Stainless Steel Short-Path Gas Cells – For Measurement of High Concentration Vapor Components



FEATURES OF THE SHORT-PATH GAS CELLS

- Measurement of high concentration vapor phase samples
- Wide range of pathlengths, from 1 to 20 cm
- Heated option up to 300 °C
- Baseplate mounted for stability in the sample compartment

Expanding our gas accessory selection for those analyzing more concentrated gases, PIKE Technologies is offering Stainless Steel Short-Path Gas Cells. The durable construction of the metal body may be used under pressure when matched with a suitable IR window. Cell pathlengths are 1, 2, 5, 10, 15, and 20 cm. For maximum precision or to prevent condensation of specific components, heated models are available for a maximum temperature of 200 °C and 300 °C.

All cells are delivered with welded VCR fittings. To offer the greatest flexibility, users may optimize their configuration further by choosing VCR and Swagelok valves and 1/4" compression fittings. PIKE gas cells have been designed for easy maintenance and cleaning. Our gas cells are baseplate mounted for stability in the spectrometer and offer purge collars to eliminate atmospheric water vapor and CO₂ interferences in the spectrum.

Custom pathlengths and cell materials are available. Contact PIKE Technologies for special orders.

SHORT-PATH GAS CELLS SPECIFICATIONS

Temperature Range	Ambient to 200 °C or 300 °C
Accuracy	+/- 0.5%
Voltage	115 or 230 VAC
Sensor Type	RTD
Controllers	
Digital	+/- 0.1 °C
Input Voltage	100 - 240 VAC
Output Voltage	~24 VAC

ORDERING INFORMATION

Stainless Steel Short-Path Gas Cells (insert spectrometer model for XX)

PART NUMBER	DESCRIPTION
164-21XX	1 cm Stainless Steel Gas Cell
164-22XX	2 cm Stainless Steel Gas Cell
164-25XX	5 cm Stainless Steel Gas Cell
164-20XX	10 cm Stainless Steel Gas Cell
164-27XX	15 cm Stainless Steel Gas Cell
164-29XX	20 cm Stainless Steel Gas Cell

Notes: Windows not included; order separately. 1 and 2 cm pathlength gas cells use 25 x 4 mm windows and all others use 38 x 6 mm windows. Not all pathlengths fit commercial spectrometer sample compartments. Please select the baseplate mount for your FTIR spectrometer model by selecting the XX code from the fold-out on the last page of our catalog or from our website.

Heated Short-Path Gas Cells (insert spectrometer model for XX)

PART NUMBER		DESCRIPTION
200 °C	300 °C	
164-41XX	164-31XX	1 cm Heated Stainless Steel Gas Cell
164-42XX	164-32XX	2 cm Heated Stainless Steel Gas Cell
164-45XX	164-35XX	5 cm Heated Stainless Steel Gas Cell
164-40XX	164-30XX	10 cm Heated Stainless Steel Gas Cell
164-47XX	-----	15 cm Heated Stainless Steel Gas Cell

Notes: Windows not included; order separately. 1 and 2 cm pathlength gas cells use 25 x 4 mm windows and all others use 38 x 6 mm windows. Not all pathlengths and heating options fit commercial spectrometer sample compartments. High temperature O-rings are included with the 300 °C model. Heated short-path gas cells include a digital temperature controller and heating assembly. Please select the baseplate mount for your FTIR spectrometer model by selecting the XX code from the fold-out on the last page of our catalog or from our website. Purgeable optics is not an option on the 15 cm heated gas cell. Please contact PIKE Technologies for custom pathlengths.

IR Transparent Windows for Stainless Steel Short-Path Gas Cell (must select a minimum of 2)

PART NUMBER		DESCRIPTION
25 x 4 MM (1, 2 CM)	38 x 6 MM (5, 10, 15, 20 CM)	
160-1217	160-1322	BaF ₂
160-1211	160-1342	CaF ₂
160-1133	160-1320	KBr
160-1127	160-1343	KRS-5
160-1124	160-1321	NaCl
160-1114	160-1329	ZnSe
160-1109	-----	ZnSe, double anti-reflective coated

Stainless Steel Short-Path Gas Cell Optional and Replacement Parts

PART NUMBER	DESCRIPTION
164-4000	VCR Valve Kit
164-4001	Swagelok Valve Kit
164-4002	VCR to 1/4 inch Tube Adapter
164-4006	O-Rings, Viton, 25 mm Window (2), max temp 200 °C
164-4008	O-Rings, Viton, 38 mm Window (2), max temp 200 °C
164-4007	O-Rings, Hi-Temp, 25 mm Window (2), max temp 325 °C
164-4009	O-Rings, Hi-Temp, 38 mm Window (2), max temp 325 °C