

Heated Gas Flow Cell – For Streaming Gas Analysis

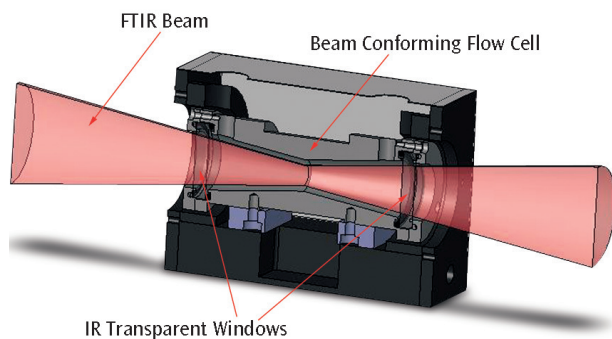


FEATURES

- High IR throughput, minimum cell volume ideal for preserving flowing gas composition
- Temperature control to 300 °C
- Your choice of IR transparent windows – user-changeable
- Compatible with most FTIR spectrometers

The PIKE Technologies Heated Gas Flow Cell is recommended for high-performance FTIR sampling of flowing gas samples. The beam-conforming design of the Heated Gas Flow Cell provides for low cell volume (38.5 mL) and a 100-mm pathlength, compatible with most FTIR spectrometers. This beam-conforming design also provides maximum IR throughput with no vignette of the IR beam. The gas cell may be heated up to 300 °C to prevent condensation of higher molecular weight gas species. The PIKE Technologies Heated Gas Flow Cell includes standard Swagelok® fittings for connection to 1/8" tubing and its stainless steel composition is compatible with pressurized applications up to 100 psi when using an appropriate IR window.

Temperature control is provided by the digital controller. Ramp and soak profiles and integrated data collection are available when using PIKE TempPRO software. The Heated Gas Flow Cell requires selection of your choice of 38 x 6 mm IR transparent windows and temperature controller.



Optical geometry for PIKE Technologies' Heated Gas Flow Cell.

SPECIFICATIONS

Temperature Range	Ambient to 300 °C
Accuracy	+/- 0.5% of set point 24 VDC
Sensor Type	3 wire Pt RTD (low drift, high stability)
Dimensions (W x D x H)	91 x 140 x 121 mm (excludes baseplate mount)
Controller	Touch-panel display with USB interface. PIKE TempPRO software (sold separately) for PC control with unlimited ramps and automated data collection.
Input	100–240 VAC, auto setting, external power supply
Output	6 A/24 VAC 150 W maximum

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
162-20XX	Heated Gas Flow Cell <i>Includes cell, high-temp O-rings, and FTIR mounting plate</i>

Note: Replace XX with your spectrometer's Instrument Code listed on page 164.

TEMPERATURE CONTROLLERS (must select one)

PART NUMBER	DESCRIPTION
076-1610	Digital Temperature Control Module
007-0207	PIKE TempPRO Software

Note: Digital Temperature Control Module is required. PIKE TempPRO software sold separately.

IR TRANSPARENT WINDOWS FOR HEATED GAS FLOW CELL

(select minimum of 2)

PART NUMBER	DESCRIPTION
160-1322	BaF ₂ Window, 38 x 6 mm
160-1320	KBr Window, 38 x 6 mm
160-1343	KRS-5 Window, 38 x 6 mm
160-1329	ZnSe Window, 38 x 6 mm

Notes: For window compatibility please consult the Windows Materials Properties table on page 128 of this catalog. Find additional window selections starting on page 114. ZnSe windows should not be used above 250 °C.

REPLACEMENT PARTS AND OPTIONS

PART NUMBER	DESCRIPTION
162-2009	Viton O-Rings, max. temp. 200 °C, (2 ea.)
162-2309	High-Temperature O-Rings, max. temp. 325 °C (1 ea.)
162-2308	High-Temperature O-Rings, max. temp. 325 °C (4 ea.)

Notes: Gas Cell requires 4 O-rings total. For high-temperature purge tubes and other options, please contact PIKE Technologies.