

Venus™ Glass Bodied Long Path Gas Cells



Gemini™ Venus™ Glass bodied long path gas cells are classic Hanst cells, first made commercially available by Dr. Phil Hanst, who started producing them after a long career at NASA and the EPA. Hanst cells are in our bloodline at ICL, since we were Phil's first outlet for his product and Phil's son Steve, who worked with Phil designing gas cells for 20 years, is now a major shareholder in ICL as well as its Executive Vice President.

Venus™ cells are small to moderate volume long path gas cells designed for all purpose use in industrial and research applications. The cell design has improved significantly over the years with such advances as multilayer proprietary gold mirror coatings, improved purgeable transfer optics, and instrument specific base plate mountings. All Venus cells are fitted with Swagelok® 1/4" or 1/8" tube fittings to which valves, hose barbs or compression fittings can be attached. SS Swagelok® Valves are standard on the models listed.

Venus™ cell configurations include ICL's popular Ultra Mini Cell which measures 3" x 3" x 8" (3 meters fixed path length, 200cc volume), the Long Path Mini Cell (variable path length to 5 meters, 0.5L volume) and fixed and variable path length cells ranging from 4.8 to 8 meters. Heatable, laser aligned, base plate mounted and other custom configurations of Venus™ cells are available. Instrument specific interfaces are available for base plate mounted cell configurations.

Several common Venus™ cell configurations are shown, but custom configurations are available upon request. Prices do include KBr windows, but optional windows can be selected from our transmission window price list. RFQ for wedged windows to limit fringing a/k/a channeling. Cell mounting and other hardware, exclusive of the cell body material and valves, is black anodized aluminum. Fittings and Valves are SS Swagelok®. All cell bodies are borosilicate glass. Mirrors are GemGold™ multi-layer gold coated, removable and easily serviced.



JASCO France
17 Rue des Cerisiers
91090 Lisses - France

Tél. 01 64 97 09 60 Fax: 01 85 09 90 76
email: jascofrance@jascofrance.fr

Venus Series Gas Cells from Gemini are available in several variable-path configurations which are simple to use and can be heated to temperatures as high as 100C. Although these cells are low volume, they get fairly good optical throughput at pathlengths as high as 8 meters. Constructed from a simple pyrex glass cylinder and aluminum hardware, the optics are securely mounted in alignment to a removable sub-assembly mounted inside the cylinder. A calibrated micrometer head allows the user to easily toggle between known pathlengths from one to eight meters. Recommended for use at ambient pressure, Venus Series cells are an excellent choice for general analytical and air monitoring applications.

A - Swagelok and Nupro Valves and Fittings are used. Three 1/4" Swage connectors with O-Seal back-up utilize a 1/4" NPT hole tapped in the aluminum end plate. A stainless steel sample flow through tube extends from one valve to the bottom of the cell chamber.

B - The pathlength adjustment is provided in the form of a calibrated micrometer head, vacuum tight with only a small SS post and pin exposed to the sample.

C - The valve and fitting end plate is easily removed for service without disturbing the other elements.

D - A simple structure of aluminum rods and a ring form the outer cylindrical assembly which holds the whole system together. It consists of a 6 rods and a flange ring, all drawn together with screws. The cell body or endplates can easily be serviced without disturbing the other elements.

E - The Glass cell chamber makes it easy to observe conditions inside the cell.

F - The White cell optics are mounted on an easily removable carriage, a sub-assembly mounted to the cell interior, yet isolated from effects of temperature or pressure changes on the cell alignment.

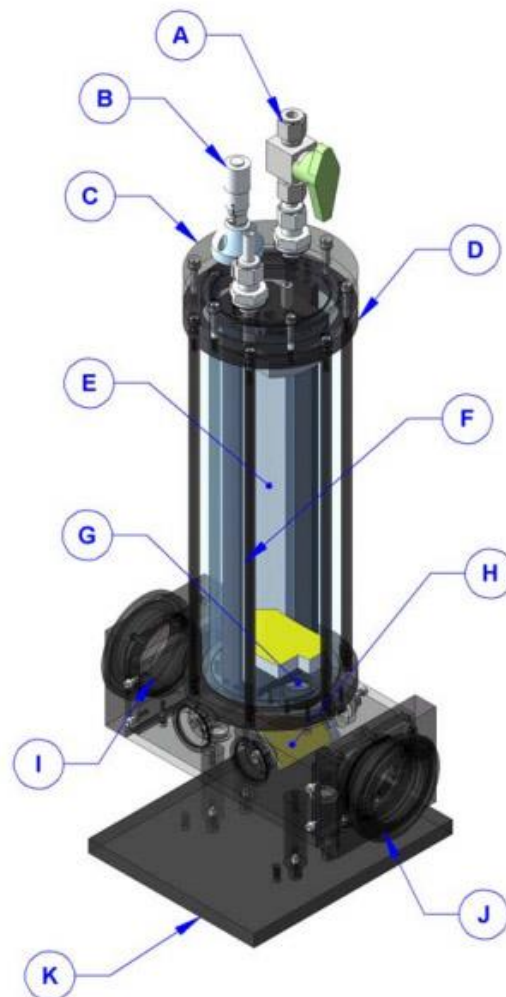
G - The window end plate carries two 25mm dia. x 4mm thick IR transmitting windows of any type. Most commonly provided are KBr, ZnSe, BaF2, CaF2, or KRS5. The cell comes with KBr windows as standard, other types of windows may be purchased separately.

H - Transfer optics are mounted on easily adjustable posts, and usually need alignment only once during the initial installation and tuning. The cell can easily be replaced and removed from the instrument sample compartment without loss of signal or alignment.

I - Purgeable transfer optics box has the cell mounted securely to it, and can be mounted in order to orientate the cell in either a vertical or horizontal direction. Purge fittings are available in the rear of the assembly, and hole covers on the front provide easy access to the transfer optics adjustments.

J - Telescoping purge rings extend to the walls of the instrument sample compartment for a purge-tight seal.

K - The instrument base plate is provided custom with each order to mate with the user's specific FTIR or spectrometer.



0008-9292	VENUS™ GAS CELL-3M PATHLENGTH-200CC VOLUME-SLIDE MOUNTED	0.20000 L
0008-9293	VENUS™ GAS CELL- VARIABLE 1-5M PATHLENGTH-0.5L VOLUME-SLIDE MOUNTED	0.5 L
0008-9294	VENUS™ GAS CELL-4.8M PATHLENGTH- 0.5L VOLUME-SLIDE MOUNTED	0.5 L
0008-9295	VENUS™ GAS CELL-6.4M PATHLENGTH- 0.75L VOLUME-SLIDE MOUNTED	0.5 L
0008-9296	VENUS™ GAS CELL- VARIABLE 1.6-8M PATHLENGTH-0.75L VOLUME-SLIDE MOUNTED	0.75 L
0008-9278	Optional Heater Jacket for Mercury™ or Venus™ Gas Cells	
0008-9279	Spectrophotometer-Specific Interface for Gemini™ Mercury™, Venus™, Mars™, Earth™ or Saturn™ Gas Cells	
0008-9280	Replacement Valve Kit for Gemini™ Mercury™, Venus™, Mars™, Earth™ or Saturn™ Gas Cells	
0017-4804	High Stability PID Digital readout Temperature Controller, 230 volts, CE marked	



JASCO France
 17 Rue des Cerisiers
 91090 Lisses - France

Tél. 01 64 97 09 60 Fax: 01 85 09 90 76
 email: jascofrance@jascofrance.fr