

Features: Venus Series Long Path Gas Cells

fixed-path low-volume long path cells for room temperature operation

Venus Series Gas Cells from Gemini are available in a variety of low-cost configurations which are simple to use and extremely reliable. Although these cells are low volume, they get extremely good optical throughput at pathlengths as high as 6.4 meters. Constructed from a simple pyrex glass cylinder and aluminum hardware, the optics are fixed in permanent alignment to the cylinder using optical epoxy. Recommended for use at ambient temperature and 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 valve and fitting end plate is easily removed for service without disturbing the other elements.

C - 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.

D - Precision aligned White cell mirrors are fixed in alignment directly to the pyrex cell chamber using optical epoxy.

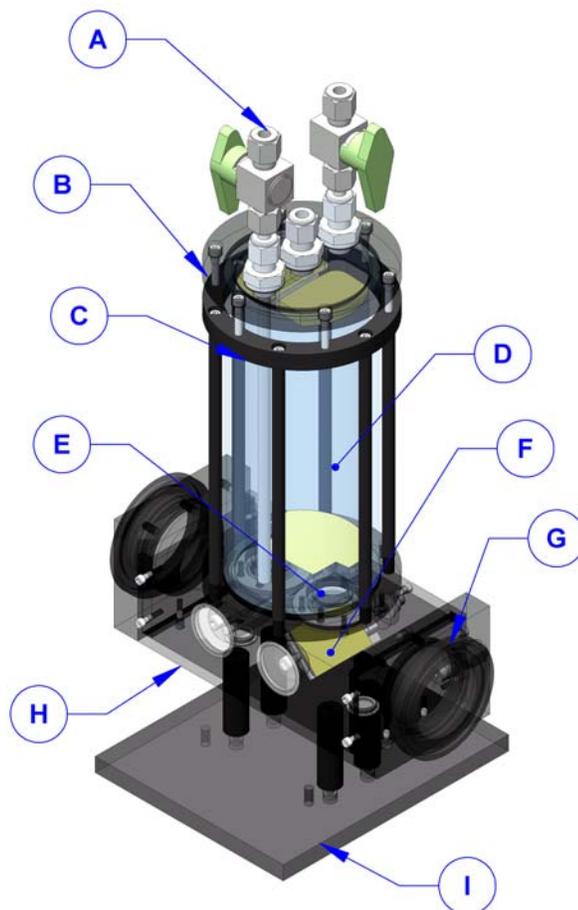
E - The window end plate carries two 25mm dia. x 4mm thick IR transmitting windows of any type. Most commonly provided are KBr, ZnSe, BaF₂, CaF₂, or KRS5. The cell comes with KBr windows as standard, other types of windows may be purchased separately.

F. 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.

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

H. 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.

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



Gemini Venus Series Gas Cells

