International Crystal Labs

Specialty Gas Cells for Infrared Spectroscopy

Mercury Series Short Path Gas Cells

Short Path IR Transmission Cells for Gas Analysis

INTERNATIONAL

CRYSTAL LABORATORIES

SPECIALTY GAS CELLS

Short path gas cells are useful for analysis of pure gases or mixtures with concentrations of not less than 100ppm. Gemini[™] single pass gas cells from ICL are constructed of electropolished 316ss,and are available at many different path lengths between from 1cm and 20cm.

ICL has many Mercury[™] Series single pass cells ideal for use in any commercial FTIR spectrometer including (but not limited to) Bruker, Thermo, Jasco, Perkin Elmer, etc., with hardware coupling to any type of sample compartment whether Lab-Bench or Industrial FTIR configurations.







1cm and 10cm Cell with Base Plate and Purge Hardware

These rugged and robustly constructed gas cells are ideal for specialty gas analysis because they are leak tight and capable of high vacuum performance; and they can also be made pressure safe with the appropriate window material selection. ZnSe windows, for example, enable the cell to tolerate pressures in excess of 125 psi.

Cells are equipped with high quality Swagelok[®] and VCR gas fittings that are welded to the cell body and then helium leak tested for outstanding high vacuum performance and safe operation at high pressure.

Generally provided mounted on an instrument base plate, the cells also include the mounting and purge connections to isolate the cell in the FTIR sample compartment and likewise can be temperature controlled as high as 200C and beyond.

Part Number	Description	Path length / Volume	Window Size
9275	Mercury 316ss Electropolished 1cm Short Path Gas Cell	1cm / 10cc	25mm X 4mm
9636	Mercury 316ss Electropolished 3cm Short Path Gas Cell	3cm / 30cc	25mm X 4mm
9274	Mercury 316ss Electropolished 5cm Short Path Gas Cell	5cm / 50cc	25mm X 4mm
9273	Mercury 316ss Electropolished 10cm Short Path Gas Cell	10cm / 100cc	37.5mm X 4mm
9272	Mercury 316ss Electropolished 15cm Short Path Gas Cell	15cm / 150cc	37.5mm X 4mm
9870	Mercury 316ss Electropolished 17cm Short Path Gas Cell	17cm / 170cc	37.5mm X 4mm
9280	Heater and Jacketing for Short Path Gas Cell 115v / 230v		(specify voltage)
5548 / 4804	Digital Temperature Controller 115v / 230v		
9280	Valve Kit includes two Swagelok Plug Valves		

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Specialty Gas Cells for Infrared Spectroscopy

Mercury Series Short Path Gas Cells



Short Path IR Transmission Cells for a Variety of Specialty Gas Applications

Mercury Series Short Path Cells from ICL/Gemini are suitable for a range of specialty gas applications, usually for pure gases or mixtures from 100ppms to % percent levels of concentration. The design features of the accessories are ideal for specialty gas analysis, from the welded VCR connections and Swagelok gas fittings, the high vacuum / pressure-safe characteristics, and a variety of standard IR transmission windows.

While the cells come standard with broad-band IR transmission windows of Pottasium Bromide (KBr), any other IR windows like BaF2, CaF2, or ZnSe can be provided, depending on the demands of the application. Kal Rez orings can be substituted for Viton for extreme chemical compatibility, and heaters and controllers are available for high temperature operation, The complete system seamlessly integrates into any FTIR sample compartment.

