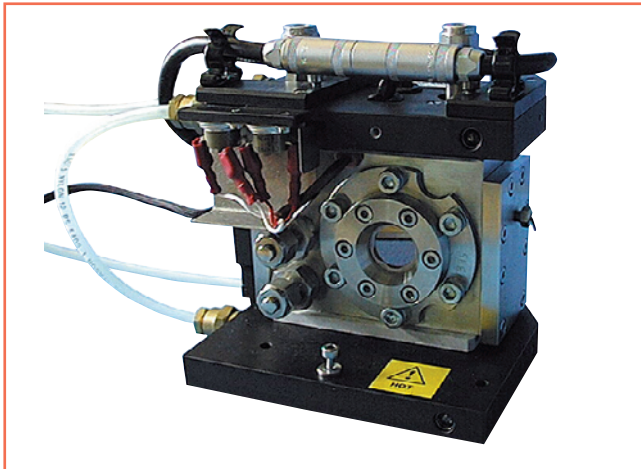


## High Temperature/High Pressure Cell



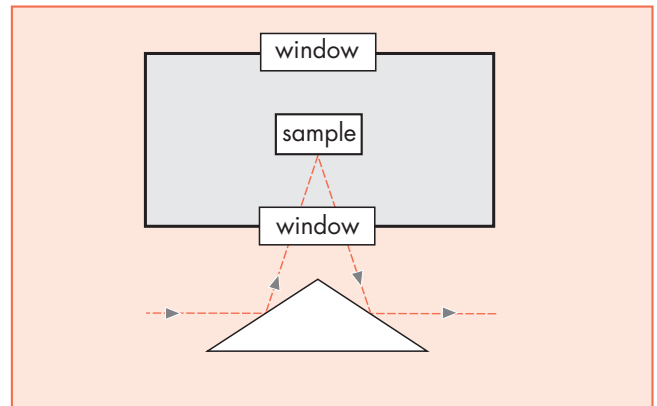
High Temperature/High Pressure Cell

The High Temperature/High Pressure Cell is a water cooled, stainless steel chamber that can operate at up to 800°C and 1000 p.s.i.. The cell supports a 13mm disk for transmission analysis. It also allows the study of vapors generated by the thermal decomposition of a sample, and an optional specular reflectance mode is available.

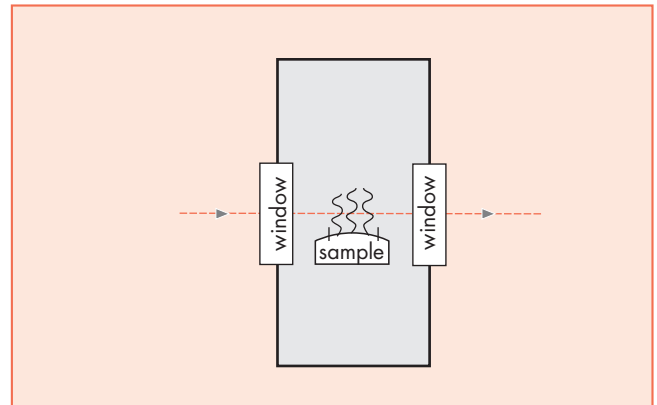
The unit incorporates several safety features including external fuse protection to prevent overheating and a burst disk to prevent over pressurization. The ZnSe cell windows are heated separately to reduce condensation. Three gas ports are provided for gas analysis and purging.

### Product Highlights

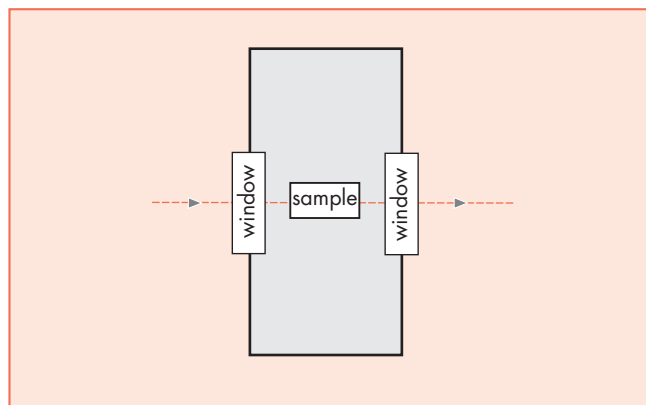
- Programmable controlled temperature up to 800°C
- Pressure up to 66bar (1000 p.s.i.)
- Vacuum down to 10<sup>-4</sup>bar (10<sup>-1</sup>Torr)
- Easy interchange between analysis modes (transmission - decomposition)
- Reflection mode (optional)



Reflection



Decomposition



Transmission

- Heated windows
- Dual temperature safety features
- Low voltage heater system for operator safety
- Pressure burst disk
- Safety certified window units
- Pathlength: 30mm
- Cell volume: 80cm<sup>3</sup>
- Sample loading: 13mm disk or approx. 0.4cm<sup>3</sup> sample

### Applications

- Catalysis studies
- Oxidation studies
- Polymorphism
- High pressure gas studies
- Combustion studies
- Oxidation state chemistry
- Solid fuels
- High temperature transmission and reflection properties



Specifications	
Optical pathlength	3cm
Aperture window	13mm
Aperture sample holder	11mm
Sample diameter	13mm for transmission
Volume of sample cup	0,4cm <sup>3</sup>
Cell volume	80ml
Max. pressure	6bar
Vacuum	down to 10 <sup>-4</sup> bar
Max. temperature	800°C
Window material	ZnSe
Cell material	stainless steel
Low voltage heater system	30V

Ordering Information High Pressure /High Temperature Cell	
(Please specify spectrometer make and model)	
Ordering-No.	Type
<b>35850</b>	High Pressure- /High Temperature Cell includes: optical unit with baseplate, transmission/decomposition holder, ZnSe window assembly and temperature controller
<b>35855</b>	High Pressure- /High Temperature Cell includes: optical unit with baseplate, transmission/decomposition holder, ZnSe window assembly, reflectance mode optical assembly and temperature controller
<b>32800</b>	Additional charge for RS 232 interface for temperature controller
<b>32801</b>	Additional charge for USB interface for temperature controller
<b>32802</b>	Additional charge for RS 485 interface for temperature controller

Ordering Information Spares	
Ordering-No.	Type
<b>35860</b>	Reflectance mode optical assembly (Please specify spectrometer make and model)
<b>35865</b>	Seal kit
<b>35867</b>	ZnSe window unit, 1 pc., tested and certified
<b>35868</b>	Sample cups for decomposition analysis, 2 pcs.
<b>35869</b>	Replacement burst disc