

# Storm™ 10 - Short Pathlength Gas Cell

The Storm™ 10 series gas cells are the ideal choice for measuring the infrared spectra of concentrated gases, gas mixtures and vapors (>1% levels) at ambient temperatures and pressures. Cells are suitable for operation in all modern FT-IR spectrometers using a cell mount.

The 10cm fixed pathlength design is user demountable allowing for easy

cleaning and maintenance.

Applications flexibility and chemicals compatibility is ensured through a range of body materials (Pyrex or Stainless Steel) and a wide choice of window materials.

Gases can be analysed in static or flow modes, and stopcock valves are provided for evacuation, sample introduction and release.

## Product Highlights

- 10cm fixed pathlength single pass design
- Demountable design for ease of maintenance
- Choice of cell body materials
- Choice of window materials
- Twin taps for evacuation, static or flow-through operation

## Applications

- Analysis of concentrated gases & vapors
- Residual solvent vapor analysis
- Liquid head space analysis

## Specifications

Pathlength:	10cm
Volume:	132cm <sup>3</sup> (Pyrex) 114cm <sup>3</sup> (Stainless Steel)
Pressure range:	Vacuum to ambient
Temperature range:	Ambient
Body material:	Pyrex or Stainless Steel
Window seals:	Neoprene
Clear aperture:	38mm
Windows:	Client to specify
Mount:	Standard 3"x 2"

## Ordering Information

GS5000	10cm Pyrex Gas Cell body
GS5800	10cm Stainless Steel Gas Cell body
GS5030	Cell Mount for 10cm Gas Cells

For a complete Storm™ 10 Gas Cell system, please order gas cell body, cell mount and a pair of windows of your choice.

### Spares and Consumables

GS5040	Seal Kit for Pyrex Gas Cell
GS5050	Stopcock for Pyrex Gas Cell
GS5803	Vacuum Valve for Stainless Steel Gas Cell
GS5804	Seal Kit for Stainless Steel Gas Cell

### Window Options

GS5020	Pair of NaCl windows
GS5021	Pair of KBr windows
GS5022	Pair of CaF <sub>2</sub> windows
GS5023	Pair of BaF <sub>2</sub> windows
GS5096	Pair of ZnSe windows

### Options

GS28001	RS232 Connection kit
GS28001	USB Connection kit
GS28002	RS485 Connection kit



# Storm™ 10H - Short Pathlength Heated Gas Cell

The Storm™ 10H Heated Gas Cell is a single pass, 10cm fixed pathlength design, for the measurement of the infrared spectra of concentrated gases (> 1% levels), gas mixtures and vapors at temperatures up to 250°C. Solid and liquid decomposition studies can also be performed and the cell can be operated in static or flow-through modes.

The cell consists of a stainless steel evacuable chamber with an injection septum sample introduction port,



thermocouple port and vacuum valve. Windows are secured using threaded end caps and chemically resistant seals. The cells can be dismantled to allow easy cleaning and window replacement.

Low voltage heaters and a dedicated High Stability Temperature Controller allow safe and accurate sample heating. The temperature is measured with a thermocouple situated in the cell cavity. An RS232, RS485 or USB option allows independent temperature control using a computer.

A comprehensive range of replacement windows ensures that cells can be configured to precisely suit analytical requirements.

## CE Compliance

The Storm™ 10H Heated Gas Cell system is CE compliant ensuring that it can be operated safely at all times under the recommended conditions.

## Standard Features

- 10cm fixed pathlength single pass design
- Heated operation up to 250°C
- Temperature control to +/- 1°C
- Demountable design for ease of cleaning
- Stainless Steel construction
- Choice of window materials
- Static or flow mode
- 3"x 2" slide mounted
- CE compliant

## Applications

- Analysis of concentrated gases & vapors
- Decomposition studies of solids and liquids

## Ordering Information

GS5670 10cm Heated Gas Cell body with Controller (without windows) (Specify voltage and country)

For a complete heated gas cell system, Storm™ 10H should be ordered with a pair of windows of your choice.

### Spares and Consumables

GS5662 Flow Tubes (stainless steel, 10)  
GS5665 Injection Septa (10)  
GS5667 Seal Kit for 10cm Heated Gas Cell

### Window Options

GS5020 Pair of NaCl windows  
GS5121 Pair of KBr windows  
GS5022 Pair of CaF<sub>2</sub> windows  
GS5023 Pair of BaF<sub>2</sub> windows  
GS5096 Pair of ZnSe windows

Contact Specac Sales for special window options

### Options

GS28001 RS232 Connection kit  
GS28001 USB Connection kit  
GS28002 RS485 Connection kit

- Illustrations, descriptions and specifications in this data sheet were correct at the time of going to press. However, Specac's policy is one of continuous product development and we reserve the right to change descriptions and specifications at any time. For the latest details please contact your local Specac office or representative.

## Specifications

Pathlength: 10cm  
Volume: 114cm<sup>3</sup>  
Pressure range: Vacuum to ambient  
Temperature range: Ambient to 250°C  
Body material: Stainless Steel  
Clear aperture: 38mm  
Windows: Client to specify  
Seals: Silicon  
Heaters: 36 Volts / 120 Watts  
Thermocouple: K-type NiCr/NiAl  
Temperature controller: Specac Series 4000  
Mount: 3" x 2"

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