



# **Transmission**

# Storm™ 10 - Short Pathlength Gas Cell

The Storm<sup>™</sup> 10 series gas cells are the ideal choice for measuring the infrared spectra of concentrated gases, gas mixtures and vapours (>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 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.

Gasses can be analysed in static or flow modes, and stopcock valves provide for evacuation, sample introduction and release.

## **Ordering Information**

GS05000 10cm Pyrex Gas Cell Body GS05800 10cm Stainless Steel Gas Cell Body GS05030 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**

GS05040 Seal Kit for Pyrex Gas Cell

GS05803 Vacuum Valve for Stainless Steel Gas Cell
Seal Kit for Stainless Steel Gas Cell

#### **Window Options**

 GS05020
 Pair of NaCl Windows

 GS05021
 Pair of KBr Windows

 GS05022
 Pair of CaF<sub>2</sub> Windows

 GS05023
 Pair of BaF<sub>2</sub> Windows

 GS05096
 Pair of ZnSe Windows



### **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 & vapours
- · Residue solvent vapour analysis
- Liquid head space analysis

# Specifications

Pathlength 10cm

Volume 132cm³ (Pyrex)

114cm³ (Stainless Steel)
nge Vaccum to ambient

Pressure Range Vaccum
Temperature Range Ambient

Body Material Pyrex or Stainless Steel

Window Seals Neoprene Clear Aperture 38mm

Windows Client to specify Mount Standard 3" x 2"

Illustrations, descriptions and specifications in this datasheet 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.



# **Data**Sheet

# Transmission

# Storm™ 10H - 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, gas mixtures and vapours (>1% levels) at temperatures up to 250°C. Solid and liquid decompression 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 allow 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.

# Specifications

Pathlength 10cm Volume 114cm<sup>3</sup>

Vacuum to ambient Pressure Range Temperature Range Ambient to 250°C **Body Material** Stainless Steel Clear Aperture 38mm

Windows Client to specify

Seals Silicon

36 Volts / 120 Watts Heaters Thermocouple K-type NiCr/NiAl Temperature controller Specac Series 4000

Mount 3" x 2"



## **Applications**

- · Analysis of concentrated gases & vapours
- · Decomposition studies of solids and liquids

### 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

### Ordering Information

GS05670

10cm Heated Gas Cell body with Controller and mount (Specify voltage and country)

For a complete Storm™ 10H Heated Gas Cell sytem, please order the gas cell body and a pair of windows of your choice.

#### **Spares and Consumables**

GS05662 Flow Tubes (stainless steel, 10)

GS05665 Injection Septa (10)

GS05667 Seal Kit for 10cm Heated Gas Cell

#### **Window Options**

Pair of NaCl windows GS05020 GS05121 Pair of KBr windows Pair of CaF<sub>2</sub> windows Pair of BaF<sub>2</sub> windows Par of ZnSe windows GS05022 GS05023 GS05096

Options

RS232 Connection kit GS28000 GS28001 **USB** Connection kit GS28002 RS485 Connection kit

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