



## Typhoon™ Series Process Gas Cells



Typhoon™ process gas cells are user-configured to ensure exact matching with process requirements. Temperatures as high as 280°C and pressures as high as 1500 p.s.i. can be handled with the standard cell.

A choice of body materials is available to ensure compatibility with a wide variety of process streams. Optical designs can be configured for near infrared (NIR) or UV - Visible regions, and further optimisation is available for specific areas of the spectrum. A choice of high performance perfluoroelastomer seals ensures excellent protection against leaks. Metal covers can be specified to protect fiber fittings against the effects of condensation and mechanical impact.

A cleaning port can be specified to allow the easy cleaning of the windows without the need to remove the cell.

A range of configurations and options is available to ensure that Typhoon™ series process gas cells easily exceed the rigorous demands of industrial process monitoring.

### Advantages

- Allows remote process monitoring and control
- Improves process efficiency leading to cost savings
- Reproducible and safe sampling

The Typhoon™ series of gas cells is designed for the on-line measurement of the spectra of process gases and vapors using fiber optics. Installed on fast by-pass loops directly on the plant, Typhoon™ allows for real-time remote monitoring and control. Superior optical design, state-of-the-art sealing technology and rugged construction are combined with precision manufacturing to ensure many years of reliable, high performance.

### Applications

- Oil refining
- Petrochemicals
- Chemicals
- Pharmaceuticals
- Food
- Pilot plants



## Typhoon™ Process Gas Cells - Standard Specifications

<b>Optical range:</b>	NIR or UV-Visible
<b>Pathlength:</b>	20cm , 50cm (contact Specac for other options)
<b>Window material:</b>	Sapphire
<b>Body material:</b>	Stainless Steel 316L or Hastelloy® C276 (other options include Zirconium and Titanium . Contact Specac for details)
<b>Maximum temp:</b>	280°C
<b>Maximum pressure:</b>	1500 p.s.i.
<b>Seals:</b>	Choice of perfluoroelastomers
<b>Cell bore:</b>	10mm
<b>Fiber diameter:</b>	600µm (contact Specac for other options)
<b>Inlet/outlet tubing:</b>	1/4" (others available upon request)
<b>Thermocouple well:</b>	1/8" B.S.P. thread

### Optional Features

- Protective hoods for fiber fittings (to I.P. 65)
- Window clean-out ports

### Gas Cell Ordering Information

Typhoon™ series process gas cells are user-configured.  
Contact Specac to discuss your specific requirements.

P/N 30100 Typhoon™ T20 - 20cm Process Gas Cell in Stainless Steel 316L

P/N 30110 Typhoon™ T50 - 50cm Process Gas Cell in Stainless Steel 316L

P/N 30120 Typhoon™ T20 - 20cm Process Gas Cell in Hastelloy® C276

P/N 30130 Typhoon™ T50 - 50cm Process Gas Cell in Hastelloy® C276

### Client to specify:

- Wavelength range
- Window seals material
- Optional features



**Specac**



**SPECAC LIMITED,**  
River House, 97 Cray Ave, St. Mary Cray,  
Orpington, Kent BR5 4HE, U.K.  
Tel : +44 (0)1689 873134  
Fax : +44 (0)1689 878527  
Registered No. 1038689 England

**SPECAC INC.,**  
414 Commerce Drive, #175  
Fort Washington, PA  
19034, U.S.A.  
T: 1 866 726 1126  
E: sales@specac.com