

# FT-IR Purge Gas Generators

Flow Capacities to 102 lpm

**Parker** **BALSTON**  
Analytical Gas Systems

## Features

**Eliminate the need for costly, inconvenient nitrogen cylinders in the laboratory**

**Compact design frees up valuable laboratory floor space**

**Improve signal-to-noise ratio even on non-purge systems**

**Recommended and used by all leading FT-IR manufacturers**

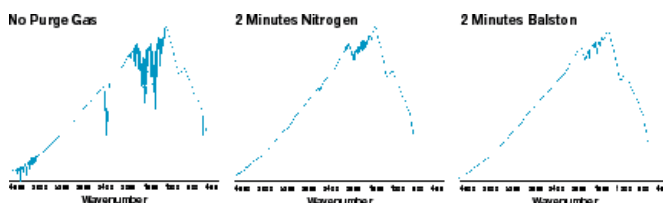
## FT-IR Purge Gas Generators

The Parker Balston 75-45, 75-52 and 75-62 FT-IR Purge Gas Generators are specifically designed for use with FT-IR Spectrometers to provide a purified purge gas and air bearing gas from compressed air. The generators supply carbon dioxide-free air at less than  $-73^{\circ}\text{C}$  dew point with no suspended impurities larger than  $0.1\mu\text{m}$ .

The units are designed to operate continuously 24 hours/day, 7 days/week. The Parker Balston Purge Gas Generators completely eliminate the inconvenience and high costs of nitrogen cylinders and dewars and significantly reduce the costs of operating FT-IR instrumentation.

The Parker Balston units offer cleaner backgrounds in a shorter period of time and more accurate analysis by improving the signal-to-noise ratio. The typical payback period is less than one year. The generators are also ideally suited for use with  $\text{CO}_2$  Analysers and Matrix GCs in addition to supplying other laboratory instruments.

The generators are quiet, reliable and easy to install; simply attach the inlet and outlet air lines, plug the power cord into a wall outlet and enjoy trouble-free operation.



This spectra comparison illustrates that a Balston FT-IR Purge Gas Generator allows an FT-IR to be purged at a much higher flow rate than is practical with nitrogen. The sample chamber purged by the Balston unit is free of  $\text{CO}_2$  and water faster than the sample chamber purged by nitrogen.



**The Parker Balston Type 75-52 FT-IR Purge Gas Generator**

## Here's what your colleagues say:

“ A Balston FT-IR Purge Gas Generator and Self Contained Lab Gas Generator were used in conjunction with the Society for Applied Spectroscopy Fourier Transform Infrared Spectrometry Workshop at the University of Georgia, which was organised by Dr. Peter R. Griffiths. The Self Contained Lab Gas Generator provided excellent purge for six spectrometers. The organisers were so pleased with the performance of the Balston Systems they have requested that Parker Balston participate in future workshops. ”

- Dr. James A. de Haseth and Dr. Peter R. Griffiths

# FT-IR Purge Gas Generators

Flow Capacities to 102 lpm

## Principal Specifications

### Flow Rate for Specified Dew Point

Inlet Pressure 6.9 barg	75-45	17 lpm
Inlet Pressure 4.1 barg		9 lpm
Inlet Pressure 6.9 barg	75-52	34 lpm
Inlet Pressure 4.1 barg		17 lpm
Inlet Pressure 6.9 barg	75-62	102 lpm
Inlet Pressure 4.1 barg		57 lpm
CO <sub>2</sub> Concentration		< 1 ppm
Dew Point		-73°C
Min/Max Inlet Air Pressure		4.1 barg/8.6 barg
Max Inlet Air Temperature (1)		25°C
Air Consumption for regeneration @ 6.9 barg	75-45	14 lpm
	75-52	28 lpm
	75-62	57 lpm
Inlet/Outlet Port Size		1/4" NPT (female)
Electrical Requirements		220 VAC/50 Hz
Dimensions	75-45	180 x 330 x 150mm
	75-52	320 x 710 x 230mm
	75-62	330 x 1020 x 230mm
Shipping Weight	75-45	11 kg
	75-52	18 kg
	75-62	36 kg

Note:

(1) Outlet dew point will increase at higher inlet compressed air temperatures

## Ordering Information

Description	Model Number	
FT-IR Purge Gas Generator	75-45-12-VDC, 75-52-12-VDC, 75-62UK	
Annual Maintenance Kit	75-45-12-VDC	MK7505
	75-52-12-VDC	MK7552
	75-62UK	MK7520
Installation Kit for all models		IK7572

## Optional Accessories

Auxiliary Coalescing Prefilter	2002N-1B1-DX
Pressure Regulator	W-405-4032-000
Flow controllers (request AGS supplied catalogue)	W-FM Series, 72-400

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with company's policy of continued product improvement Parker Hannifin UK Ltd reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a programme of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control of Parker Hannifin UK Ltd, we cannot give any warranty as to the relevance of these particulars to an application. It is the client's responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application.

P-7545 ISSUE 4.0 OCT 02