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Carrier Gas

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Purity

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“Bump” Free

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Removes CO<sub>2</sub> and water from instrument compressed air supplies. Designed for the Thermalox range of TOC/TN<sub>b</sub> analysers

## Description

The TOCPure carrier gas generator produces clean carrier air with very low levels of CO<sub>2</sub>, water and hydrocarbons. It can supply carrier gas for up to three Thermalox instruments. It may also be supplied with a floor standing silent compressor if an instrument air (oil free) supply of compressed air is not available.

The TOCPure can either be bench top or wall mounted

## Carrier Gas Generation

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***Purity, availability***

## Principal of Operation

The TOCPure uses the established "Pressure Swing Adsorption" (PSA) principal. This uses an adsorptive molecular sieve; this preferentially adsorbs the contaminants at high pressure. The flow then reverses and at lower pressure desorbs and back flushes the adsorbed contaminants to vent.

Using a duplex (two adsorbent vessels) system allows for the continuous production of pure gas by alternating between the vessels, each containing molecular sieve. During each cycle the duty vessel back flushes the off-line vessel and supplies pure gas to the analysers.

The re-pressurising of the second vessel is done just prior to switching this vessel on-line. This minimises the carrier variation and pressure "bump" to the molecular sieve.

Finally the outlet is polished with a chemical scrubber to provide really clean, pure carrier gas.

Dew point	< -70°C
CO2	< 1.0 ppm (vol)
Inlet Pressure	3.5-10.0 Barg
Outlet Pressure	0-8.0 Barg (>2.0 Bar diff pressure required)
Max Outlet Flow	65.0 l/hr
Air Consumption	Max 180 l/hr
Dimensions (HxWxD)	37x15x12 cm
Weight	8.0kg
Connection Ports	1/8" Swagelok compression
Power	110/240VAC; 50/60 Hz; 0.5 Amp

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