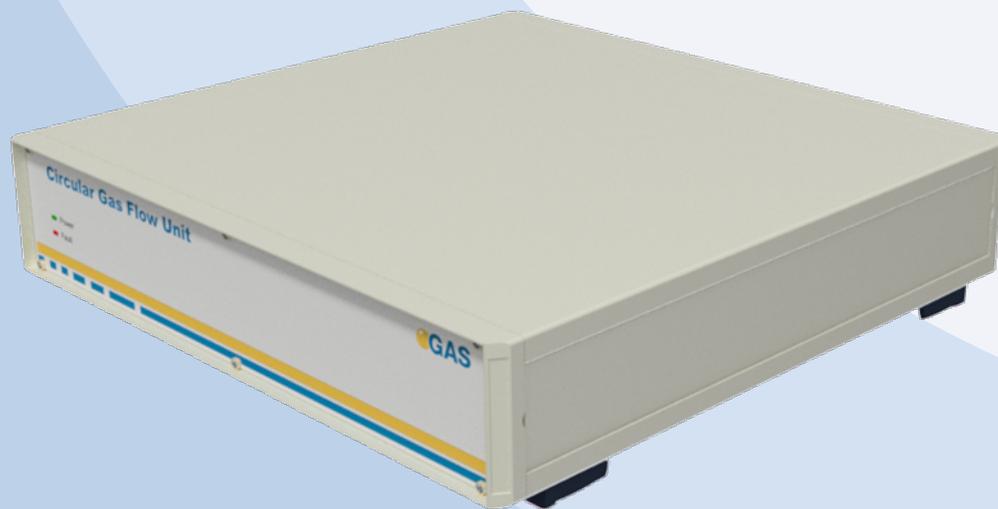


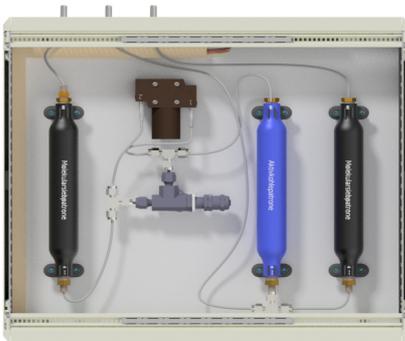
# Circular Gas Flow Unit

Gas Generator for G.A.S. Instruments



## Circular Gas Flow Unit

The Circular Gas Flow Unit (CGFU) is an optionally available module particularly developed for the autonomous, mobile and by that more flexible use of G.A.S. measurement systems. Using the CGFU makes an external gas cylinder redundant, because the instrument is operated with circulating air that is filtered. For this purpose the analytical instrument can easily be coupled to the CGFU by Swagelok connectors ('plug-and-play'). Two molecular sieves and activated carbon filter make sure that the air inside the systems' circuit is cleaned to a high grade. Lifetime of the these filters depend on concentration, chemical properties and humidity of the analyzed samples. G.A.S. keeps exchange units that can be supplied instantly so that costs and down times for customers are minimized.



Technical drawing of the CGFU. Two molecular sieves and an activated carbon filter clean the circulating air to a high grade.

### Advantages:

- extended application spectrum for the G.A.S. measuring systems
- autarkic gas supply
- low operational costs (no gas consumption)

### Feasible Applications:

- on-site tests of bad smell from industrial plants
- online monitoring of toxic industrial chemicals (TICs) which regard to maximum allowable concentration
- areas where gas cylinders are not accepted

G.A.S. Gesellschaft für analytische Sensorsysteme mbH  
 Otto-Hahn-Straße 15, D-44227 Dortmund, Germany  
 Phone: +49 231 9742 6550 / Fax: +49 231 9742 6555  
 info@gas-dortmund.de / www.gas-dortmund.de



CGFU coupled to a GC-IMS

**Housing:** 19" compatible, stackable, IP 20 enclosure, CE-marking, optional: rackmounting kit

**Dimensions:** 449 x 435 x 84 mm (WxDxH)

**Weight:** 6 kg

**Gas Connectors:** 3 mm stainless steel Swagelok® connectors for gas inlet, gas outlet and vent.

**Electrical Connectors:** Ribbon cable with 15-pin sub D connectors

**Power Supply:** Through instrument

**Operable Pressure ( $p_{rel}$ ):** ~3 bar

**Lifetime Pump (continuous operation):** >1 year

**Internal Filter:** molecular sieve (regenerative) and activated carbon (refillable)

### System Requirements/Characteristics:

- G.A.S systems require an additional circuit board for power supply and communication with the CGFU
- only suitable for applications with air as matrix
- not suitable for measurements of flammable gases