

TG Series: iTOC Gas Generators

Superior performance, long life



Features:

- **THC < 0.05 ppm (as methane), CO₂ < 1 ppm, H₂O < 1 ppm**
- **Flat baselines, high performance**
- **Safer and less expensive than cylinders**
- **Low cost of ownership**
- **Virtually maintenance free**

Applications

- **TOC Analysers, burn and carrier gas**
- **GC-FID**
- **UHP air requirements**

TOC gas generators from cmc Instruments are designed for a stress free life. The TG series are quiet, easy to install and delivered as complete units. Constant, high purity, gas for TOC analysis you can rely on.

For GC-FID applications requiring low H₂O the TG series can be configured to provide this specification with steady flow.

Catalytic oxidation and PSA (Pressure Swing Adsorption) technology are used to remove hydrocarbons and CO₂/H₂O respectively. The compressed air has first been filtered to remove any water, oil, dust and aerosol. The outlet filter ensures no particles produced or introduced in the generator are transported to the analyser. The clear

bowl filters allow easy inspection and maintenance. This guarantees reliable, ultra pure purge gas production.

The molecular sieve regenerates automatically on a continuous basis. So the system is designed for 24/7 running.

If a compressor is integral to the generator then there is risk of heat and/or vibration and/or condensation affecting both the quality of the gas and the lifetime of the system. cmc Instruments recommend a separate compressor or in-house compressed air supply.

Low cost of ownership and minimal maintenance is the result. To protect the system from oil, water or dust it is recommended to change the filter annually.

The TG series is available in 6 standard capacities from 600 to 20,000ml/min. Other capacities available on request.

Customise your cmc Instruments generator with the features you want. **TG Smart** options include flowmeter, pressure gauges, failure indications and alarms from gas, water and power supply together with automatic switchover to cylinders in case of system failure.

Designed and manufactured in Germany these products represent quality at an affordable price. Perhaps more importantly, the excellent reliability and almost zero downtime that can be expected over many years brings with it peace of mind.

Specification

Electrical requirements: 230V, 50Hz

Warm up time: <10 min

Outlet hydrocarbon: <0.05 ppm
(measured as methane)

Outlet CO₂: <1 ppm

Outlet H₂O: < 1 ppm

Inlet pressure: 6.5-10 bar

Connections: 6mm (others on request)

Max power input

TG 600, 2000, 4000, 8000: 420W

TG 15 K, 20 K: 1600W

Power demand (W)

TG 600: < 30

TG 2000: < 40

TG 4000: < 60

TG 8000: < 90

TG 15 K: < 120

TG 20 K: < 150

Weights and Dimensions

Dimensions (w x h x d) mm:

TG 600, 2000, 4000, 8000:

310 x 540 x 460

TG 15 K, 20 K:

470 x 540 x 460

Weights net:

TG 600: 10 kg

TG 2000: 12 kg

TG 4000: 15 kg

TG 8000: 20 kg

TG 15 K: 24 kg

TG 20 K: 30 kg

Ordering Information

Part no.	Description	
TG 600	TOC gas generator, < 0.05 ppm hydrocarbon (measured as methane), <1 ppm CO ₂ , <1 ppm H ₂ O, 230V (110V option available)	Max gas flow, 600ml/min
TG 2000		Max gas flow, 2000ml/min
TG 4000		Max gas flow, 4000ml/min
TG 8000		Max gas flow, 8000ml/min
TG 15 K		Max gas flow, 15,000ml/min
TG 20 K		Max gas flow, 20,000ml/min
Options		
	Flow control and flow meter	
	Pressure gauge	
	Temperature control OK/standby	
	Isolated alarm contacts (power, gas, temperature) without log function	
	Isolated alarm contacts (power, gas, temperature) with log function	
	Consequence of stoppage - close/switchover to bottle	
Spares		
	Replacement pre-filter and outlet filter (set)	