Thermo Scientific FOCUS GC

Full-sized GC performance



Thermo Scientific AI/AS 3000 II Autosampler

Combined with the 8-sample AI 3000 II Autoinjector or the 105-sample AS 3000 II Autosampler, the FOCUS GC is positioned in line with your laboratory's throughput requirements at any moment in time, thus preserving scalability.

Thermo Scientific TriPlus Autosampler

For additional productivity and flexibility, the Thermo Scientific TriPlus Autosampler is the ideal solution, able to simultaneously automate two adjacent FOCUS GC gas chromatographs. Scalability is preserved, with capacities for up to 300 samples and multiple injection modes.

Specifically targeted for routine quality control and high productivity laboratories, the Thermo Scientific FOCUS GC is a compact, single-channel gas chromatograph.

Conceived and built around the "core" hardware and unique features of the Thermo Scientific TRACE GC Ultra, the FOCUS GC™ incorporates new, best of breed electronics. The FOCUS GC is the reference for precision and accuracy of results, as well as a standard for durability in QA/QC and high throughput environments.



Compact Size

Small footprint for bench space optimization: 430 x 510 x 350 mm (HxDxW)

Optimized User Interface

Allows simple control of the main functions of the GC while preventing access to the more critical parameters of the method from unauthorized personnel. In line with the requirements of OA/OC environments.

Automatic Column Characterization

Automatic measurement of the effective column's resistance for exceptional column-to-column and instrument-to-instrument retention time reproducibility at no additional cost.

Wide Oven

Wide oven with front opening allows easy accessibility for straightforward installation of capillary columns mounted on standard diameter cages. Oven dimensions are 225 x 225 x 140 mm (HxWxD)

Additional Instrument Control

Instrument start-up and real-time diagnosis, on-line help describing each parameter, logbook with deviation records, and local keyboard lock provide complete and safe system handling.

Leak Check

Automatic leak check function for rapid routine system control.



Thermo Scientific FOCUS GC Gas Chromatograph

Features and Technical Specifications

Specifications

Power Supply

110 V and 230 V power supply

Base Unit

Height 430 mm, Depth 510 mm, and Width 350 mm

Weight:

Column Oven

Compatible with standard capillary column cages

Temperature range:	from few degrees above ambient to 350 $^{\circ}\mathrm{C}$
Program rates:	0.1 to 120 °C/min
Ramps:	7
Plateaus:	8
Typical cool-down time:	350 °C to 50 °C in 270 seconds
Typical heat-up time:	50 °C to 350 °C in 270 seconds

Injectors

Split-Splitless Temperature range: 50 °C to 375 °C

Purged-Packed Temperature range: 50 °C to 400 °C. Suitable for both wide bore and packed columns

Digital Pressure/Flow Controller (1000 kPa)

High pressure pneumatic module	
Ambient temperature compensation:	Yes
Ambient pressure compensation:	Yes
Gas saver:	Yes
Automatic column characterization:	Yes
Automatic leak check:	Yes
Pressure surge:	Yes

Base Body with Gas Control for FID

Includes a complete base body with all relevant pneumatic controls for three gas lines

The temperature of the base body is finely controlled in the range of 50 °C to 375 °C in 1 °C increments

The pneumatic module includes three pressure controllers, calibrated restrictors, and on/off valves for H₂, Air, and make-up gases

Detectors	MDA	Linearity	Selectivity or additional features
Flame Ionization Detector	2 x 10 ⁻¹² gC/sec	Better than 10 ⁷	Flameout detection and timed programming capability. Acquisition rate: 300 Hz
Thermal Conductivity Detector	600 pg Ethane/mL He	10 ⁶	Automated software switch function

Gas Sampling Valve

6-port sampling/switching valve available as an optional accessory for petrochemical and industrial applications. Equipped with selectable sampling loops.

FOCUS GC is compatible with AI 3000 II Autoinjector, AS 3000 II Autosampler, and TriPlus Autosampler



COMPANY WITH QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV = ISO 9001:2008 =

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Thermo Fisher Scientific (Shanghai) Instruments Co., Ltd. is ISO certified.

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